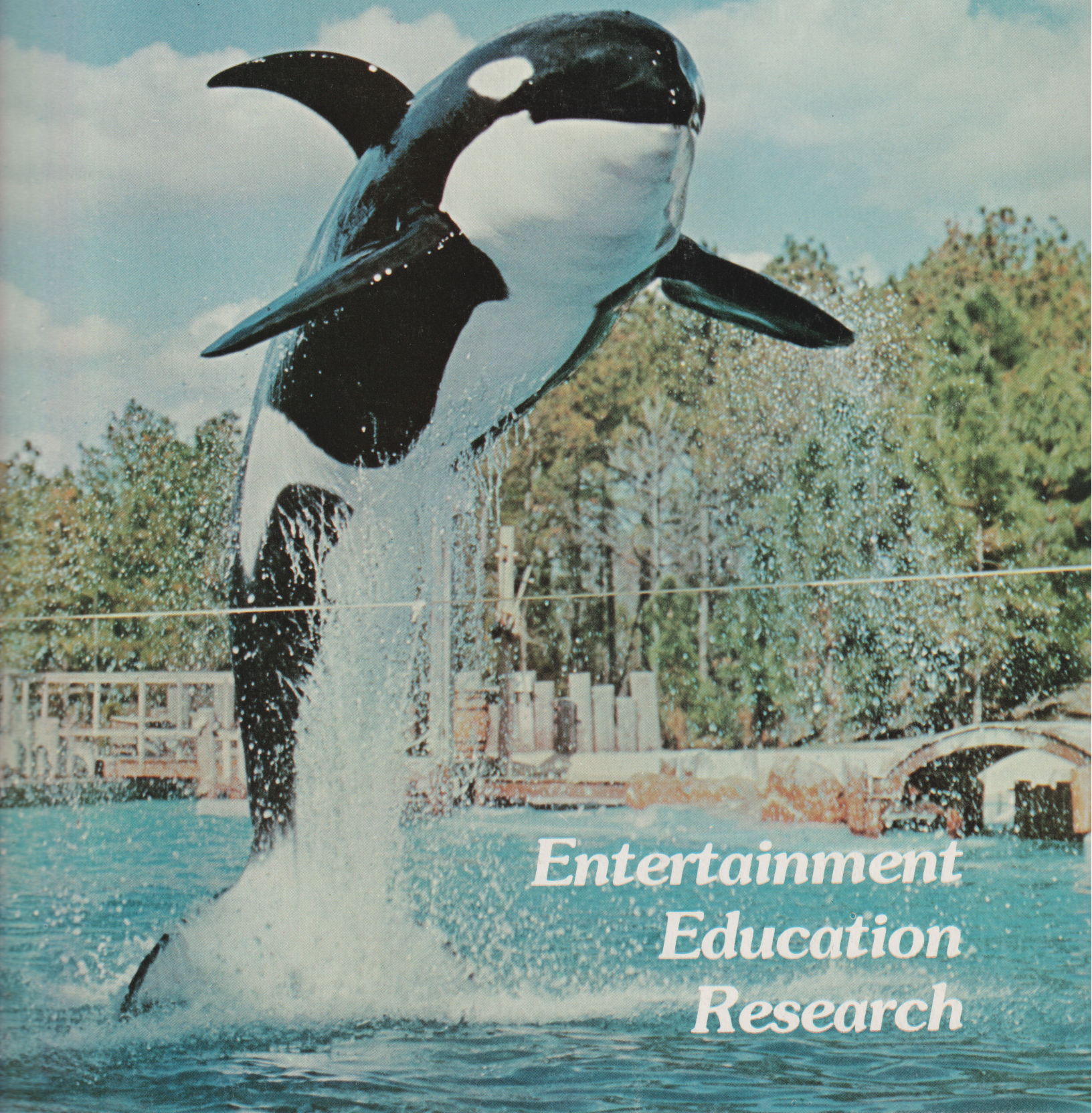


Three Worlds of **SEA WORLD®**



*Entertainment
Education
Research*





... **Entertainment**



.. **Education**



. **Research**

During your visit you will have seen, close-up, hundreds of beautiful mammals, fishes, and birds . . . and yet, you will have barely rippled the surface of the **three worlds** of Sea World.

The first of these is the **world of Entertainment** . . . thrilling leaps of killer whales and dolphins, colorful antics of the seals and otters. The second is the **world of Education** . . . every year more than a quarter million students have their minds opened to new ideas in nature through a series of expertly conceived programs. Finally, there's the **world of Research** . . . a continuing effort to discover better ways to evaluate and manage the resources of the seas.

The Sea World parks in San Diego, California; Aurora, Ohio; and Orlando, Florida comprise the largest marine park complex in the world. At each of them you'll find these three worlds of Sea World: entertainment, education, and research. This book will take you beneath the surface of those worlds.

Dive in.

Orcinus orca, the killer whale, was an object of primitive worship among the ancient peoples of North America. Its great size and speed, and its voracious appetite, made it a legendary ruler among the creatures of the sea.

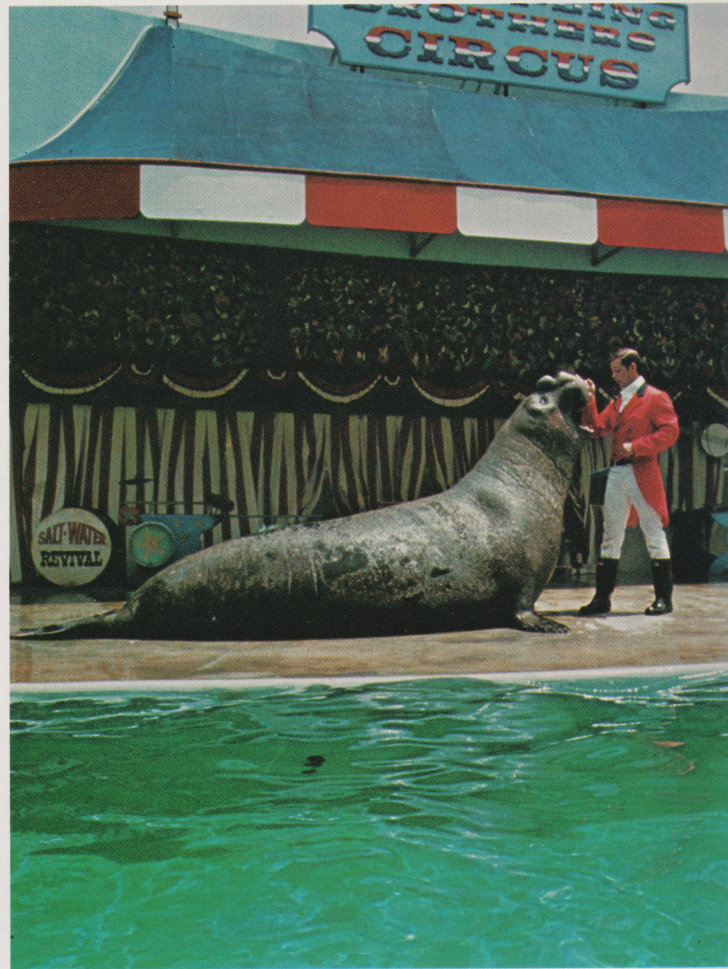
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Entertainment is Excitement . . .



1



2

As more than six thousand pounds of bone and muscle come shooting out of the water and a killer whale plants a "kiss" on a girl's cheek . . . we are understandably thrilled by Shamu's remarkable performance.

But he is really only repeating a natural behavior that occurs over and over again in the wild. Shamu has learned how and when to do it in a way that wins him approval and rewards.

At Sea World the animal behaviorists begin with the natural behavior of animals

in the wild, and teach additional behaviors related to the natural ones.

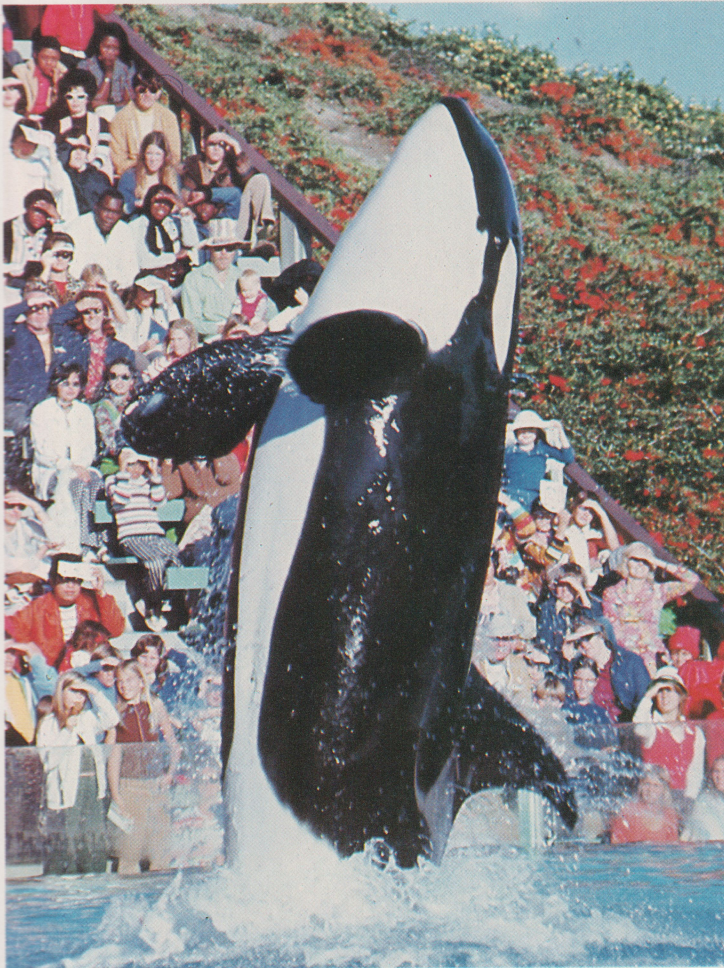
We know of the great leaping ability of killer whales and dolphins from watching them in the ocean. We know they are naturally curious about everything in the water—a curiosity developed from centuries of searching the ocean for food. So Shamu's great 15 to 20 foot leaps begin with his curiosity about a rope stretched across the pool at the surface of the water.

He swims up and nudges it and is rewarded

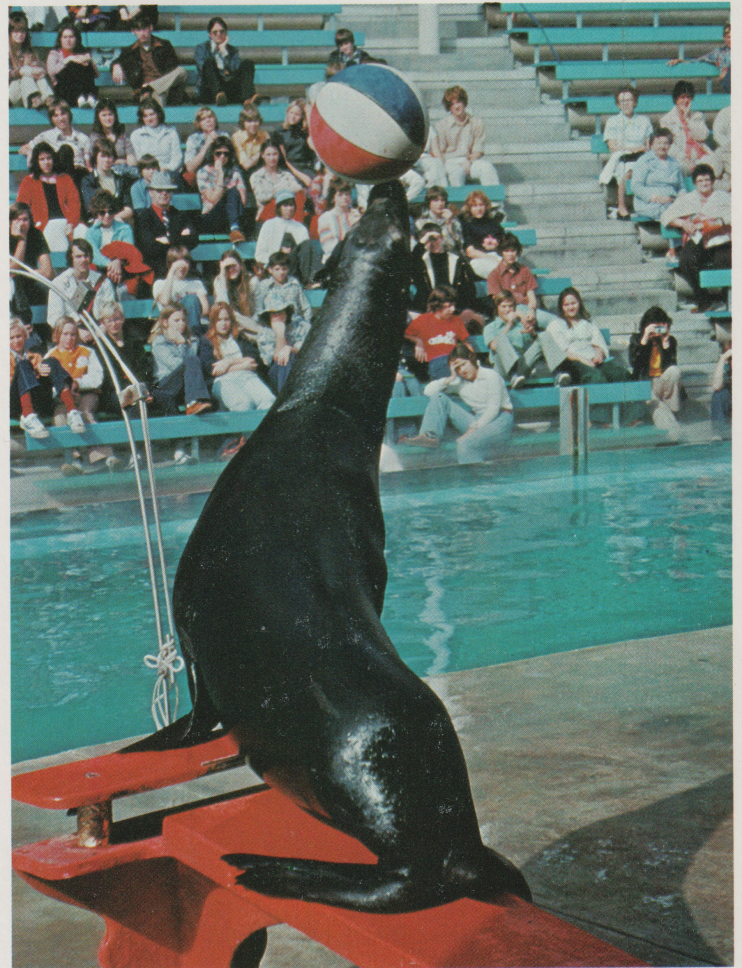
with a fish-snack, a rubdown or praise. When he does it again he gets another reward. The rope is raised a few inches above the water . . . now he rears up a bit to touch it. Good. Then he's rewarded again when he swims from the end of the pool, getting up speed for a higher jump.

A few months' effort and finally there's that great soaring leap that brings shouts of wonder from the audience. The behaviorists call it "operant conditioning." To Shamu it's doing what comes naturally.

(continued on page 6)



3



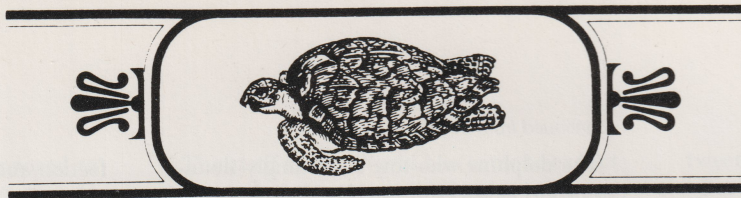
4

1. The super-intelligence and great acrobatic ability of the bottlenosed dolphin are an endless delight.
2. Despite its bulky appearance the elephant seal moves with surprisingly graceful speed and agility.
3. Shamu, the killer whale, recognized as Sea World's star attraction, borders on the incredible.
4. The California sea lion is one of the world's most eager learners and one of Sea World's most playful performers.

SEA WORLD

Season





The opportunity to get acquainted on a personal basis is one of the special experiences of Sea World. The swans shown here → are part of a unique collection of birds from around the world ... from parrots to penguins.

“unique experiences of Sea World...”

And throughout the year, the opportunity to become acquainted with a very different sort of animal ← is another of the unique pleasures afforded youngsters by Sea World's cast of “walk-arounds.”

“an unforgettable sensation”

The soft nuzzling of young deer → provides an unforgettable sensation to youngsters in the Deer Parks at Sea World of Ohio and Florida. The mutual affection evidenced here exemplifies the Sea World attitude toward all living things.



(continued from page 3)

The dolphins who tow a seemingly floundering girl to safety in Sea World's lagoon are doing something dolphins have been doing in the oceans for hundreds of years. Sea journals throughout history tell of dozens of sightings of dolphins in the wild maneuvering their weak and injured away from danger, keeping them afloat with their fins and back.

Yet, within Sea World's remarkable family of sea animals, another and more subtle force seems to be at work. It's a special bond of af-

fection and understanding that has been developed between the animals and their behavioral experts. It's hard to understand, but its existence certainly adds a touch of spontaneity and unpredictability.

Recently, when Shamu made his dazzling leap to touch the target at the end of a long pole, the target fell into the water. Shamu swam to it, and pushed it across the pool to where the trainer could pick it up. Why? It wasn't something he was "conditioned" to

(continued on page 7)



do, because the target wasn't supposed to fall off. It had never happened before.

Sometimes one of the dolphins may hesitate a bit in performing a behavior, and stare at his companion on-stage as if to say, "I've never seen that signal before."

The audience may not even notice it, but the behaviorist does. He banters with the dolphin for a few seconds—just enough to let her know her teasing has been noticed and appreciated. Then she performs perfectly.

The staff at Sea World has come to expect this kind of playfulness and enjoy it. As one member puts it, "A few years ago we might have signalled displeasure to the seal or the dolphin who didn't perform right on cue. Not anymore. We can sense when we're being put on, and we've developed ways of communicating, something like 'o.k., that's pretty cute. I know you're pulling my leg and I like it. Now let's get on with the game.' The dolphin gets the message and the bond be-

tween them becomes stronger than ever."

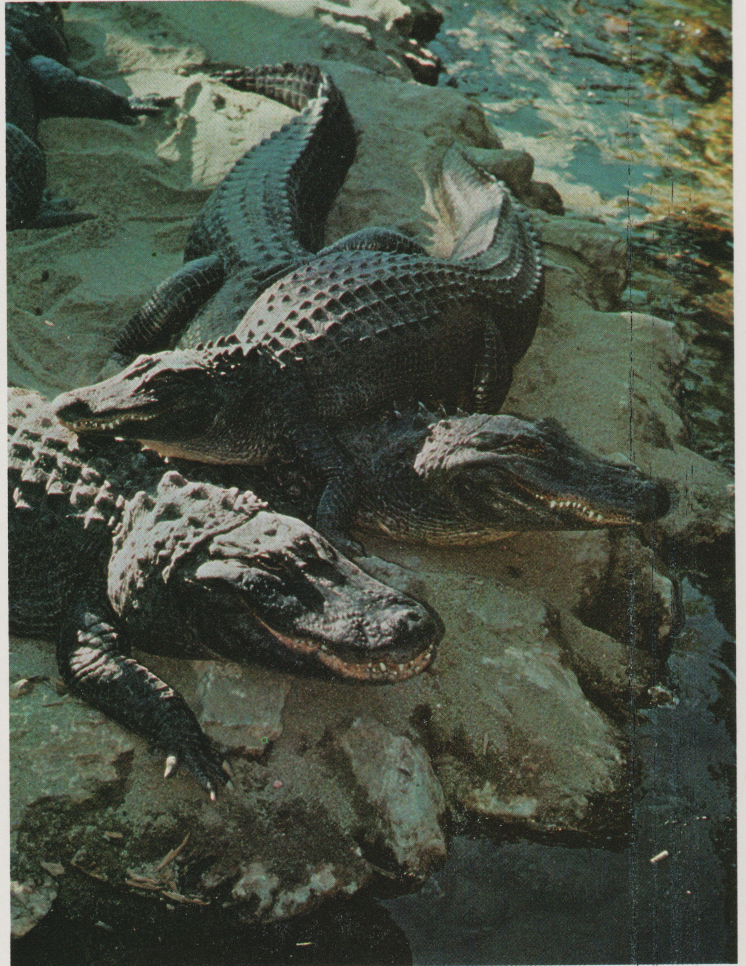
Part of the performance involves the use of underwater buzzer signals. The killer whales like to play with the electronic buzzers, but their enthusiastic play can damage the equipment. So divers take the buzzers out of the pool at the end of each day's performances . . . that is, they try to.

"It gets to be a great game," one of them relates. "The killer whale can keep you from taking out the buzzer just by swimming over

(continued on page 12)



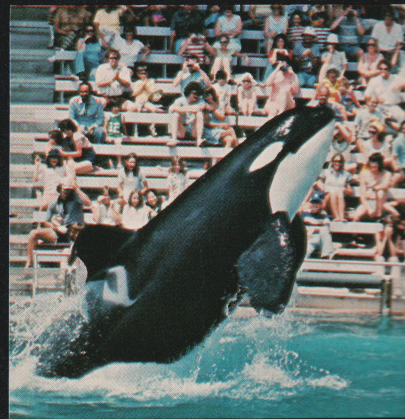
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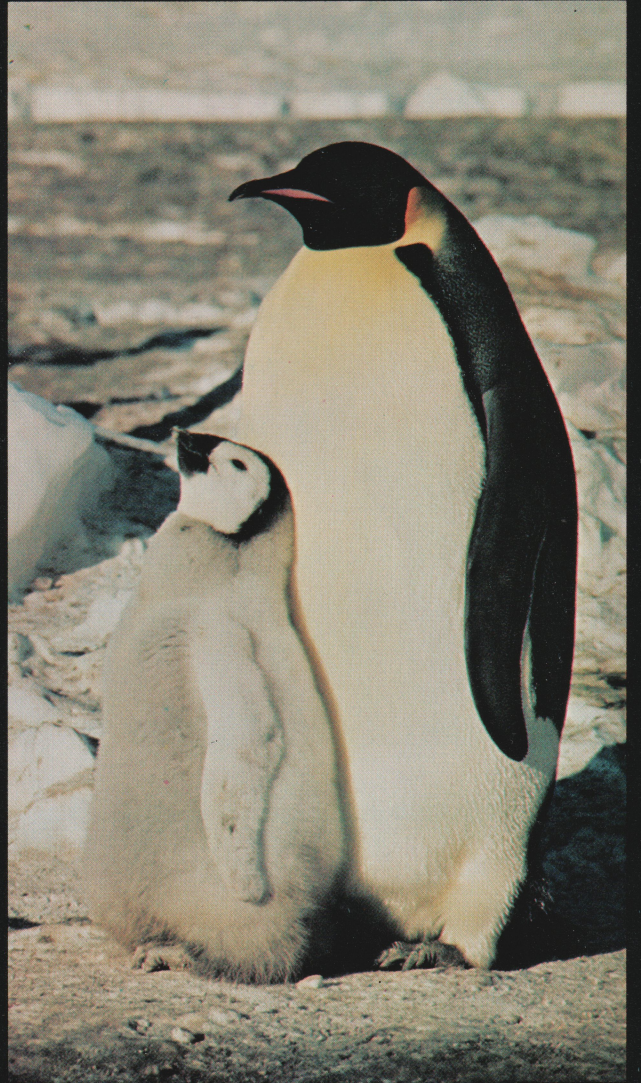
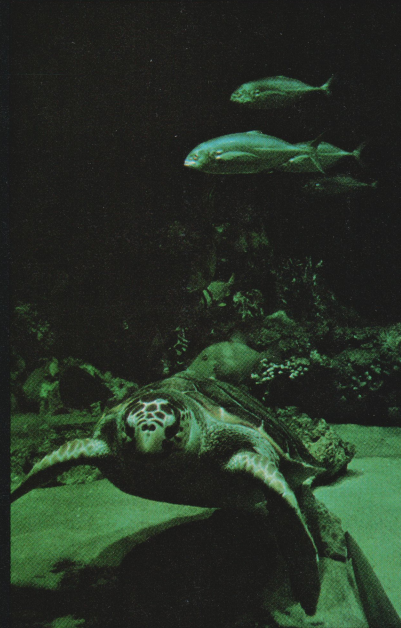
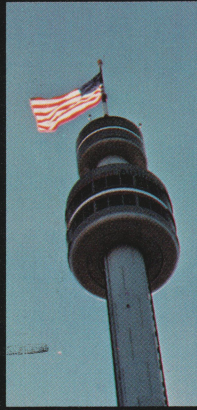
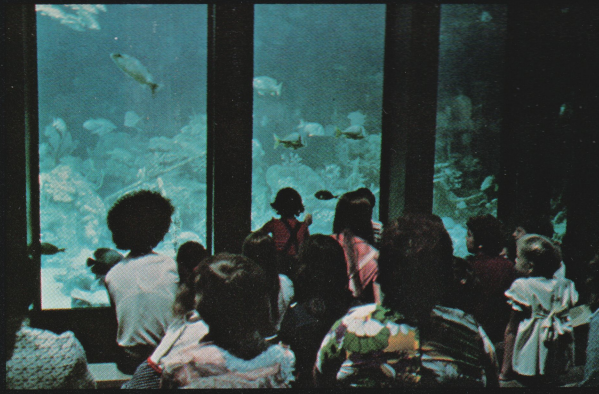
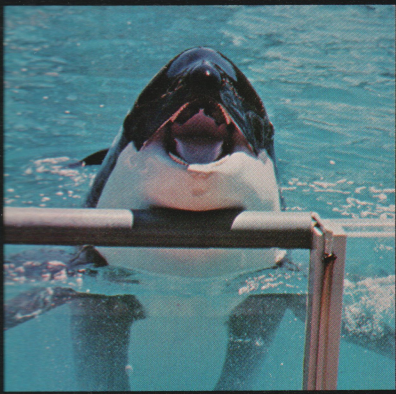


3

1. Visitors may feed the seals, but the amounts are carefully weighed and measured to form part of their controlled diet.
2. Sea World's unusual degree of open contact encourages one to get personally acquainted with the friendly and responsive dolphins . . .
3. . . . but not with the alligators. Though vital to the ecology of the southern swamps these animals don't make friends easily.

Sea World is a Fun World





(continued from page 7)

to it and covering it with his body. Every time, he beats you there by just a split second. So you pretend to be doing something else, and he'll swim away and wait in the middle of the pool. But he'll watch you like a hawk, and the instant you make a move toward the buzzer he's there in a flash. It's something each of us enjoys."

The term "killer whale" is the popular reference, and *Orcinus orca* the scientific name, for the star performer in each of the Sea

World parks. Its popular name derives from its great size and its famous hunting ability in the wild. To stay alive a killer whale must find and eat tons of fish, birds and mammals every year. Its speed and strength make it truly the ruler of the sea. Nothing feeds on the killer whale.

Yet that's the same animal that poses, plays and plants kisses at Sea World. Why the difference? Sea World explains it this way.

"Even in the wild, these creatures are very

sociable; they travel in groups, they have very complex social systems that protect the young and the females; they want to be close to each other all the time. Although they're great hunters, the desire for companionship is a close second to the desire for food.

"Here at Sea World, the need for food is taken care of by regular feedings and by the rewards they get for their behaviors. The predatory urge is satiated, and the companionship urge becomes the primary one."

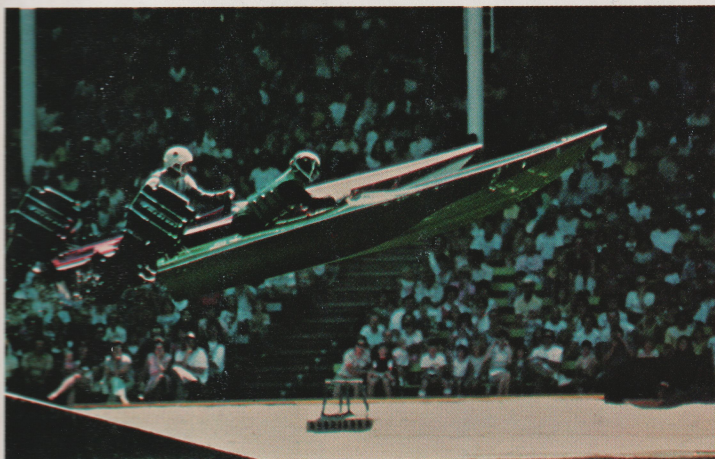
(continued on page 19)



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1. World champion water skiers perform their complex ballet routines at high speed in spectacular water-ski shows in Ohio and Florida.
2. The 5,000 seat Atlantis Theatre in Orlando provides a unique setting in which famous TV and night club personalities perform.
3. Engines churning wildly, speed boats leap from the water during this thrilling display of motorized aquatic skills.
4. A delta wing kite flyer soars high into the air before swooping in to touch down lightly before his audiences.

Opposite: Batman, Robin, and Wonder Woman thrill audiences with their super ski-skills in a "Salute to the Superheroes."







At Cap'n Kids World . . . Kids dive joyfully into a cageful of 45,000 plastic balls ← or jump on a giant air mattress . . . others climb a vinyl wave for a thrilling nine foot drop. In two acre recreation areas, exclusive to Sea World of San Diego and Ohio, youngsters are pro-

"Cap'n Kids World..."

vided the most creative play activities ever designed. In a 'do-your-own-thing' setting kids are encouraged to take off their shoes and safely lose their inhibitions.

"do-your-own-thing setting..."

Most play areas are traditionally places in which a child can go up and down on a slide, or back and forth on a swing. Usually, that's about it. At Cap'n Kids World, however, play is limited only to the extent of a child's imagination . . . (Oh, yes . . . sorry, no adults).





Fine foods for every budget are part of the Sea World experience . . . from oriental specialties and delicate sea foods, pizza or pastrami, to a simply excellent hamburger. ← And where else might you be entertained over coffee by a turtle, a duck, or a parrot?

“tranquil settings...”

The Sky Towers in San Diego and Florida → rise smoothly 320 feet above the parks giving passengers a magnificent 360 degree view . . . while Tour Guides describe all the points of special interest. Far right and below, inside and outside views of the Sky Towers.

“natural surroundings...”



← Picturesque and restful areas have been created and special emphasis placed upon providing nearly natural settings and surroundings, all a part of the respect for animal life that is basic to Sea World philosophy.





In authentic Japanese Villages traditional Ama girls dive for oysters, each one guaranteed to contain a cultured pearl. Special underground viewing areas allow visitors to observe the divers from below while musicians and graceful dancers add to the enjoyment of those remaining topside.

(continued from page 12)

With all the animals, training begins with a "positive expression" of reward for moves the behaviorist approves, and a "negative signal" for those he doesn't. The signal never involves punishment. It may consist of simply tapping on a metal bar; the animals learn quickly that the tapping means they're doing something that is not approved. They learn just as quickly that a "good" performance means a reward, a friendly rubdown or verbal praise, perhaps a fish, from their human

companion.

Sea World's firm policy is to produce entertainment that avoids any routine which makes fun of the animals, or seems to assume that they're less worthy than the humans who work with them or those who enjoy their performances.

"There was a time when people would laugh at a show that mocked animals," says Sea World's Director of Productions. "But we don't find that funny. Audiences at Sea

World enjoy the show along with the animals."

And millions of visitors testify each year to the enjoyment they derive from their contacts with Sea World's killer whales, seals, walruses, penguins, sea lions, dolphins, birds, turtles and fishes . . . on any one day, in fact, a larger number and a greater variety than the skipper of an ocean vessel might see in a lifetime.



1



2



3

1. A California sea lion takes to the air, pleased to delight his lovely companion.
2. A graceful Sea Maid and her beluga or white whale companion present a remarkable team effort in the Underwater Theatre.
3. Colorful—and sometimes audacious—cockatoos are part of the ever-pleasing scene in every Sea World park.



Education is Discovery . . .

It's only in the past few years that we've begun to wonder if we're really the most intelligent creatures on earth. Or if, in their own way, whales and dolphins might not be equally as intelligent. We were brought up believing we had a monopoly on reasoning—the power to think things out and to reflect on how things are going.



Now, research at Sea World and elsewhere is giving scientists reason to believe the whales and dolphins may think, may also remember, may know happiness and anger, and impatience and anticipation.

It's that kind of intriguing question, and a thousand others equally fascinating, that Sea World's Education programs present to young people.

How does a dolphin hear?

With his ear?

(No, with his jaw. Ears don't work so well under water.)

How does a humpback whale sing, and what do his songs mean to another whale a hundred miles away?

How do fish who live in darkness find their way around? How do they find other fish to eat?

As creatures of the dry land, we know something of our mountains, deserts and forests. But the oceans are many times larger and just as varied. There are underwater mountain ranges as vast as the Himalayas, and trenches where Mt. Everest could disappear without a trace. Millions of commu-

nities of plants and animals thrive in vertical steps from light to total darkness.

And what we know of all this is like a tiny drop of knowledge in an unending ocean of mystery.

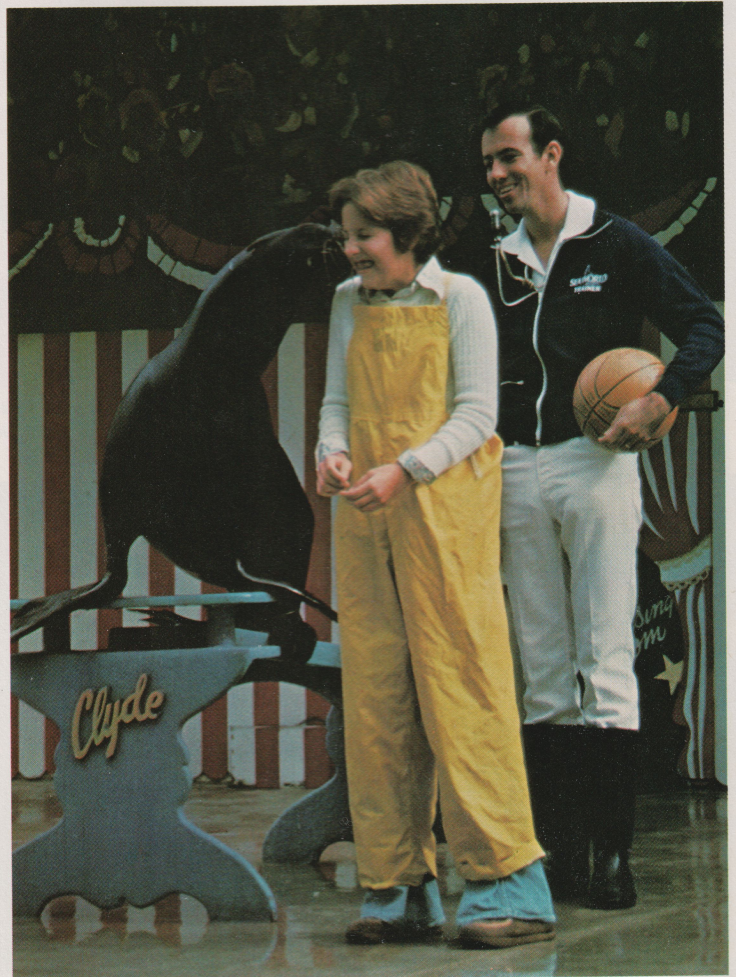
At Sea World, students don't have to read the answers to some of these fascinating puzzles of marine life. They can see, hear, touch and feel the answers.

Sea World's staff of professional educators has over the years developed a detailed plan of teaching through which the youngsters learn just how fish are different from mam-

(continued on page 23)



2



3

1. In all kinds of weather school busses arrive daily for Sea World of Ohio's elementary school program, receptive young minds learning the essential lessons of ecology.
2. How can you improve on a fish? Animal Adaptation programs encourage students to create the "ideal" sea dweller.
3. Students learn the basis of Animal Training and Behavior, one of the many subjects explored in the Education Department programs.



Upper: "Hey, look at me! I'm a coral reef polyp!" A Sea World staff teacher gets youngsters involved and excited, simulating tropical under water environments.

Lower: Another Sea World staff instructor conducts an informal, out-of-doors, question and answer session, epilogue to a puppet show the youngsters have just enjoyed.



(continued from page 21)

mals; how both have special features that let them find food to eat, and keep from being eaten; how marine animals nurse their young and breathe air, and are able to hold their breaths for astonishing periods while they dive for food.

A young student is told that walrus are sociable creatures, and as he rubs "Wally's" whiskers he experiences a unique degree of sociability as the walrus snuggles up for more.

Curious pre-schoolers explore the wonders of a simulated tidepool where they can feel, stroke and hold the beautiful creatures that

live there.

"Put them back gently," cautions the instructor. "They're alive the same as you, and they hurt the same as you do when they fall."

They are learning more than biology.

In Exploration Breach, Sea World offers a series of education programs including:

Aquatic Animal Adaptation—designed to show how animal shapes, sizes, and colors make life possible in the ocean and how these characteristics have developed and changed over the centuries.

Marine Ecology—the delicate relationships

between the animals of the sea and the "homes" they live in, emphasizing how important it is for man to be aware of these delicate balances of nature.

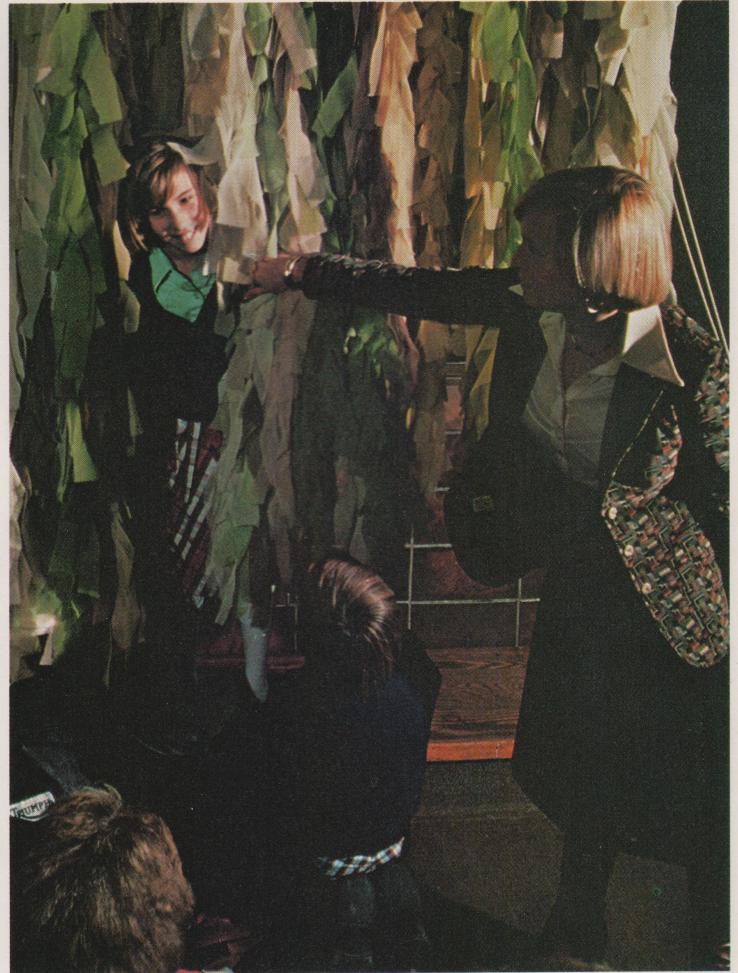
Whales—an entire program devoted to the study of the world's largest creatures who seem to be not only the most like us but who seem to like us most. On the west coast it includes an opportunity to observe California gray whales as they migrate between Alaska and Mexico.

Communications and Sound—the students learn by listening how the animals commu-

(continued on page 24)



A group of Explorer Scouts, led by a staff teacher, pause en route to class, intrigued by nesting flamingoes.



Giant kelp is a direct or indirect food source for thousands of species. Here, students simulate an undersea kelp forest, surprised to learn it contributes to their favorite ice cream.

(continued from page 23)

nicate with each other in the murky world of the deep sea, how they use sound to find their food and to keep from becoming food.

Behavior and Training—animal behaviorists share their experiences. Students take part in behavioral sessions with whales and dolphins and receive an unsurpassed insight into the physical and mental abilities of these astonishing animals.

In addition, there are special in-depth programs for more advanced students. For several years Sea World has served as a classroom for many high school marine biology groups. Some veterinary students special-

izing in marine life can gain practical experience as well as university credits at Sea World.

In Interworlds, a unique learning experience first introduced at Sea World of Ohio, teachers try to reach their students on a one-to-one basis.

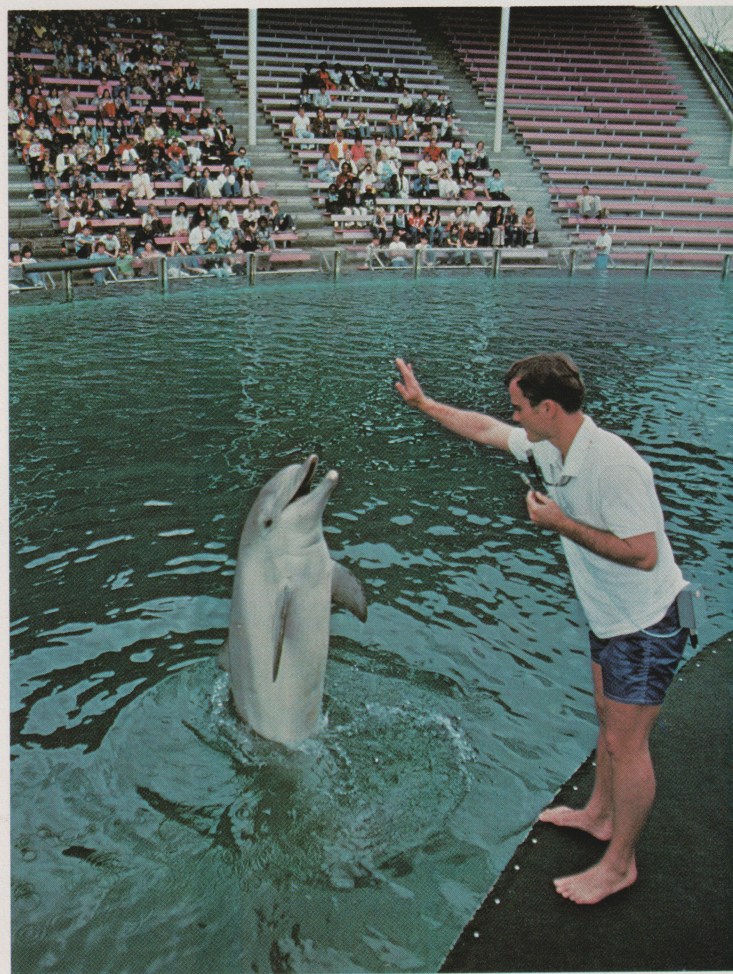
"When you work with small groups for an entire session," says one member of the education staff, "it's astonishing how much learning can be accomplished in a single morning."

Sea World is committed to the philosophy that young people be exposed to the critical

importance of the oceans, as thoroughly as possible, and as quickly as possible.

To that end Sea World produces and distributes educational, bi-lingual sound film strips, documentary films and television programs, and contributes regularly to text and reference books at all levels in its efforts to broaden a general knowledge of the sea.

At Sea World, everything that swims, walks, waddles or flies teaches a lesson of some kind.





When the predators go “on strike,” far left, other animals over-populate and go hungry. Puppeteers demonstrate the role of the predators in the food chain.

“classes in Animal Behaviors...”

Near left, an Instructor illustrates training techniques to a class in Animal Behavior.

“junkyard fish...”

In beautiful tidepools, upper right, students can see and hold some of the sea’s most fascinating creatures. In the lower photo, other students ponder the “junkyard fish” of a blighted, futuristic ocean.



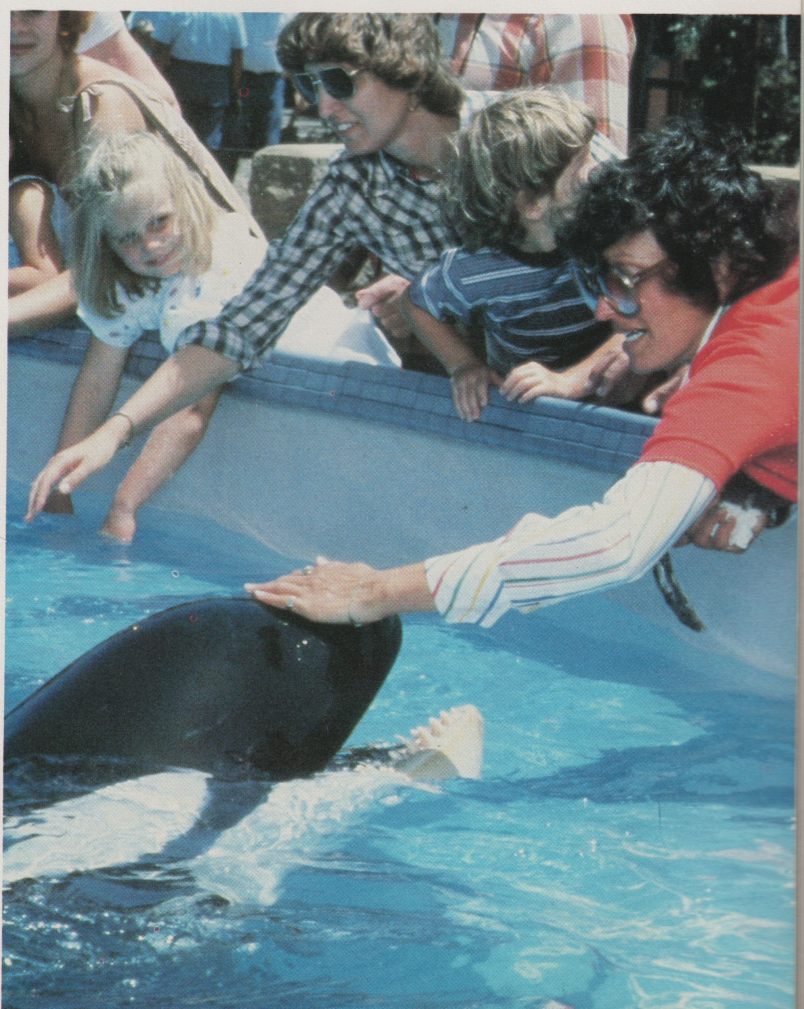


Day and night (picnics or parties)...





...an enjoyable experience for everyone!



Life In The Sea

From mountain stream to ocean floor, fish live in every water environment in the world. There are at least 20,000 kinds of fish, and scientific expeditions still return with newly-discovered species. There are fishes that walk, crawl and fly. Some transmit electricity, some fish for other fish. Some look like rocks, and inject a deadly poison into their prey. Some, like the brightly colored tropical fish of the coral reefs, are restricted to a special environment. Others, like the salmon, roam the world and are equally at home in salt water or fresh water.

These pages show you a sampling of the great diversity of ocean fish, from those that live in sunlight near the surface to those who inhabit the depths where there is only darkness, each a part of the mystery and majesty of the seas.

Can you identify the animals on this page?

California sea lion	opah
green sea turtle	coelacanth
common dolphin	lanternfish
cod	Atolla jellyfish
killer whale	gulper
albacore	anglerfish
yellowfin tuna	deepsea squid
Weddell seal	brittle star
Portuguese shark	halibut

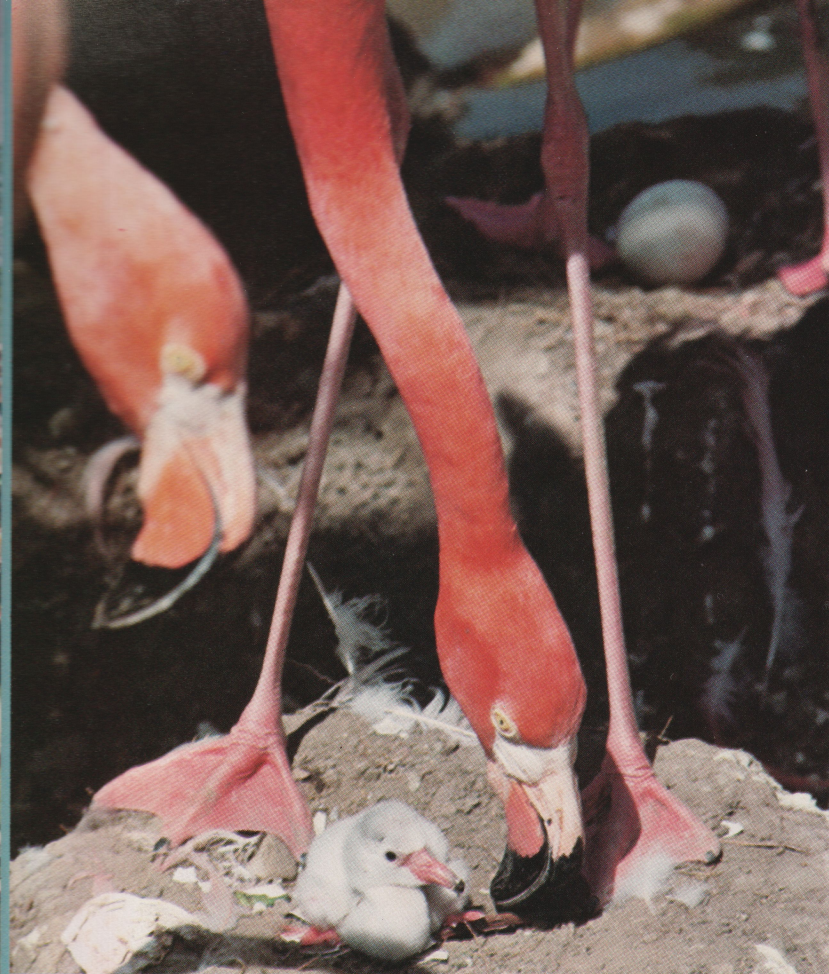
And these, on the facing page?

Portuguese man-of-war	pilotfish
saifish	chimaera
flying fish	oarfish
herring	sperm whale
whale shark	giant squid
remora	sea pen
plankton	hatchetfish
octopus	brotulid
thresher shark	viperfish
leopard shark	red opossum
great white shark	shrimp
	deepsea anemone

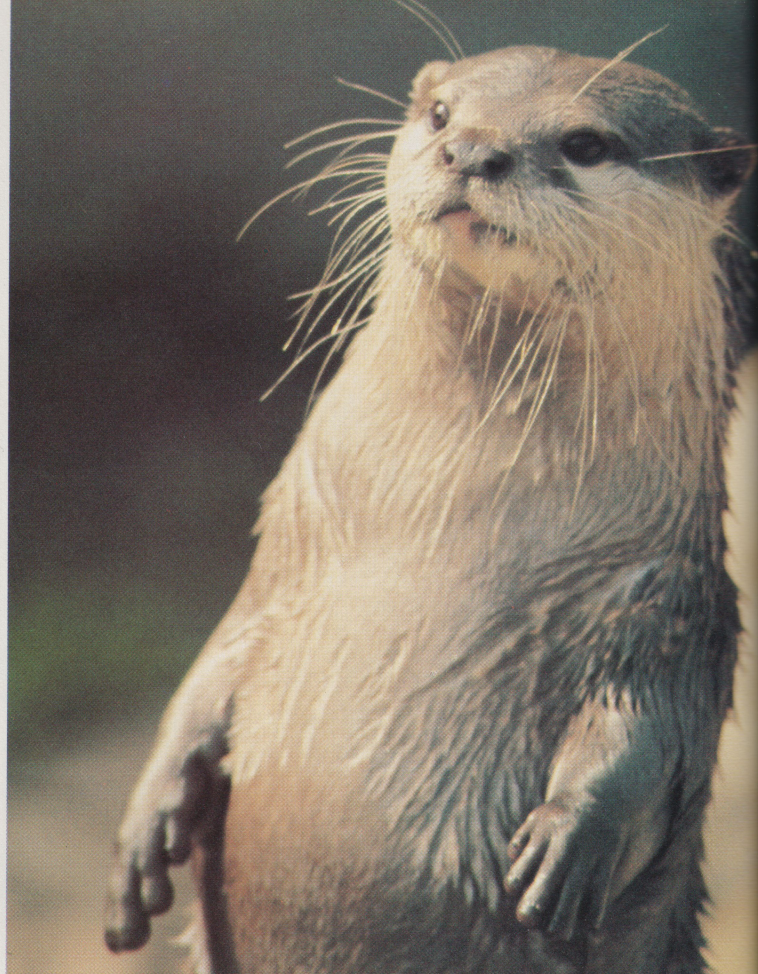




M. GIACALONE



↑ Newly hatched flamingos scarcely resemble their colorful parents.



A fresh water otter, uniquely adapted to life in rivers, streams, and fresh water lakes. ↑

↓ The sea lion lives commensurately with many species, his feeding habits helping to keep the beaches clean.





California brown pelican, once a threatened and endangered species, has made a remarkable comeback.

↓ In natural settings throughout the parks, colorful tropical birds are a constant delight.



Horned puffins, due to their bizarre appearance, are frequently referred to as 'sea clowns.'

↑ A sociable walrus does his part to demonstrate Sea World's friendly atmosphere.





Curiosity can be fun...



There is more than one way to move about at Sea World ... and if riding a pair of playful dolphins →, tandem style, isn't your preference, there are

"special Shamu strollers..."

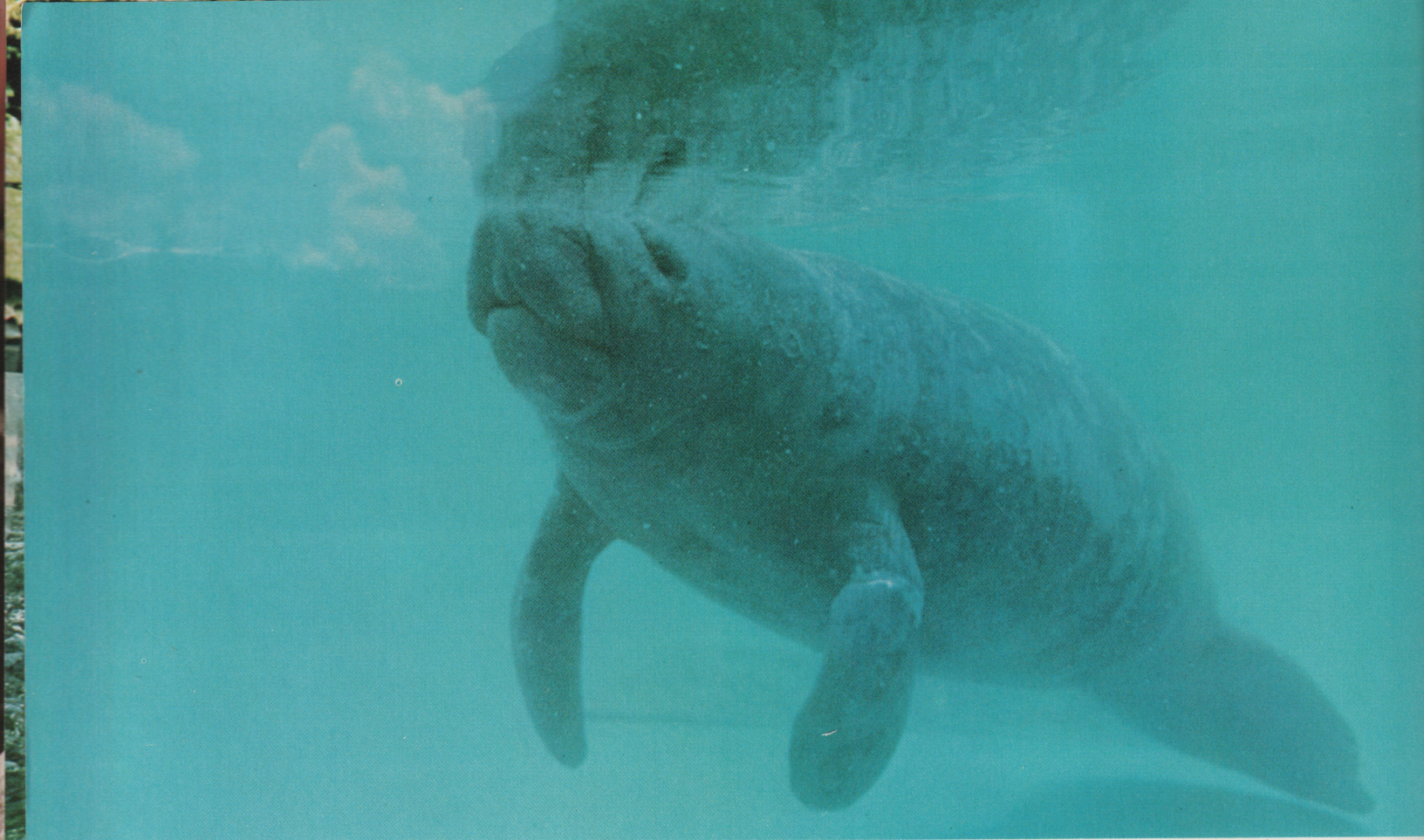
hydrofoil boats in San Diego ready to carry you across Mission Bay on cushions of air, inches above the surface of the water.

Or, for those of the appropriate age and size, Sea World's specially constructed fleet of "Shamu strollers" → provide new meaning to the phrase "whale ride" ... and additional fun for the rest of the family in every Park.

"winter wonderland..."

And, rounding out the year, Snow World at San Diego during the Christmas season → brings a touch of winter-wonderland (even snowballs) to Sea World, activities not generally familiar to the southland.





↑ A manatee, one of an endangered species native to Florida's inland waterways.

↓ California sea otter, another endangered species, native to coastal areas of northern California.



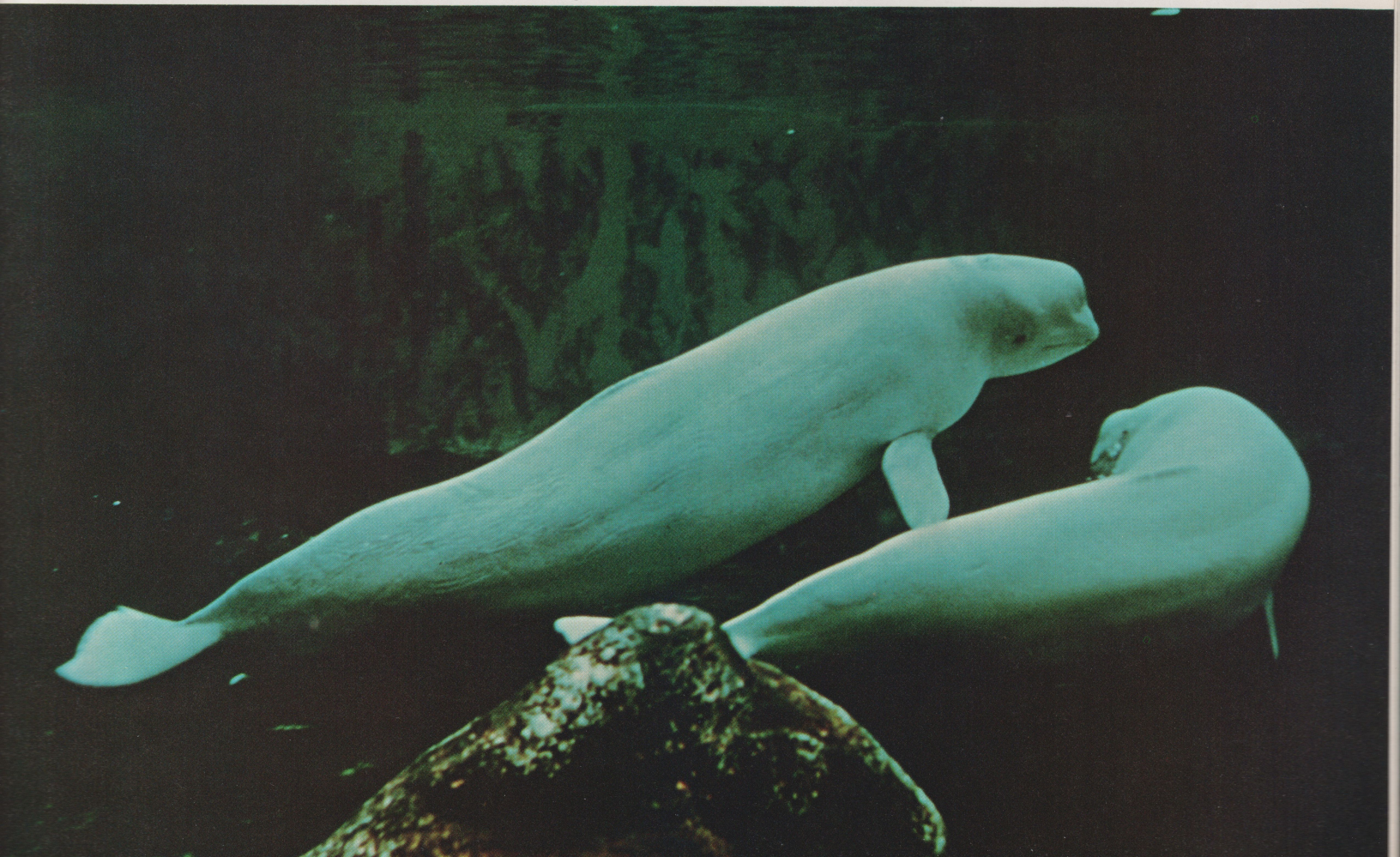


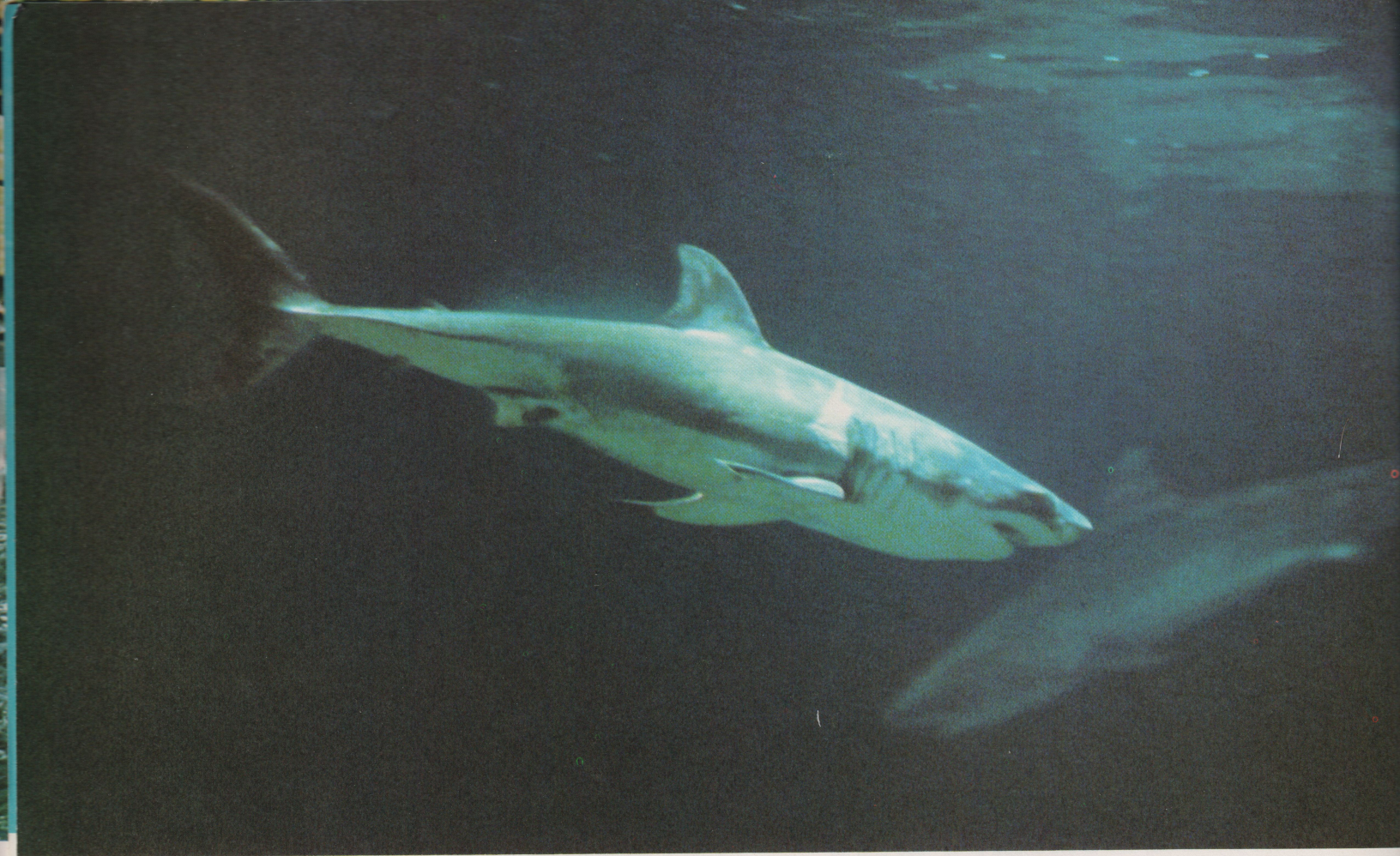
↑ The pilot whale, due to the shape of its head and its color, is also known as a 'pot head' whale, or 'blackfish.'



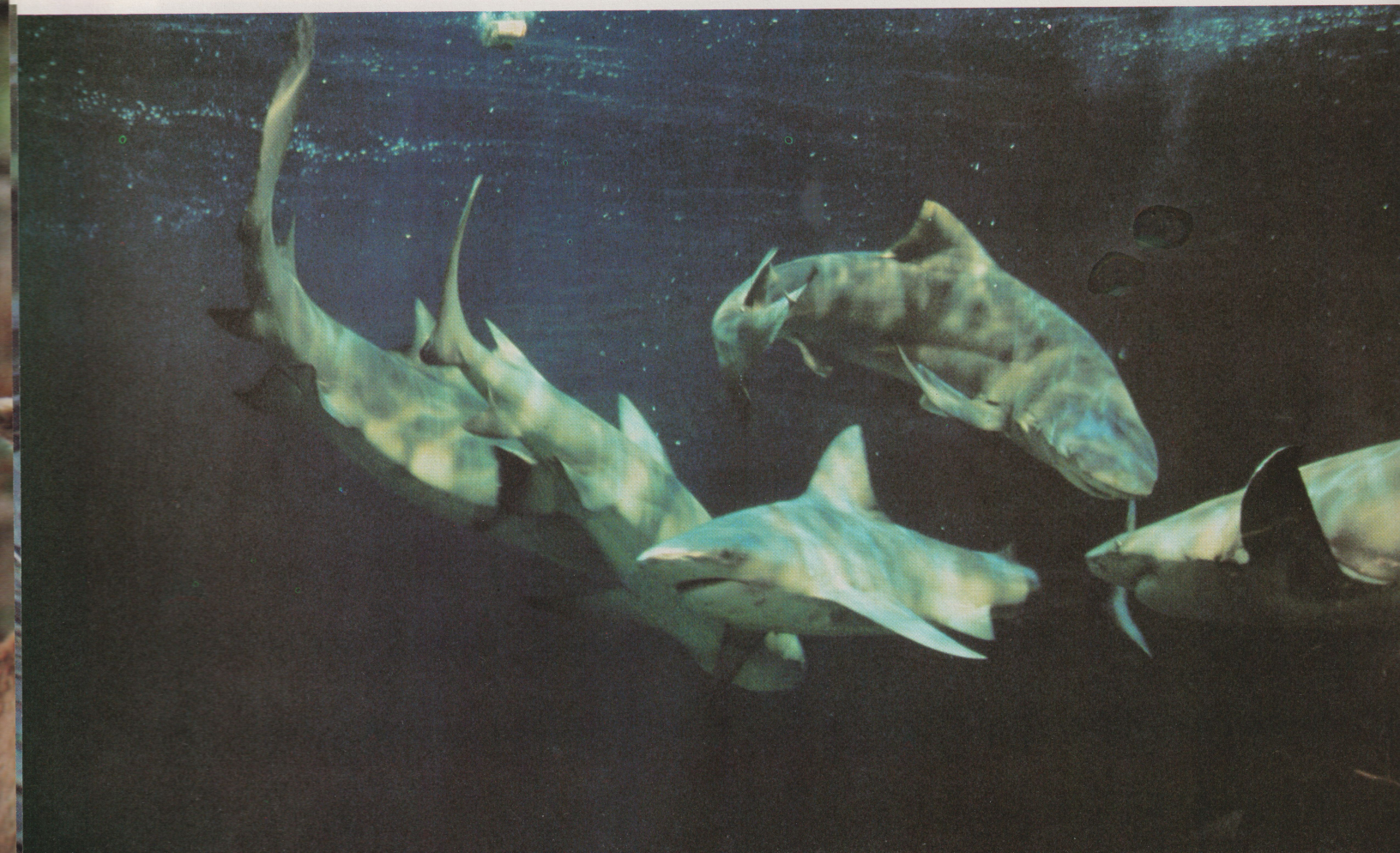
Once endangered, elephant seals have made a dramatic comeback. ↑

↓ The beluga or white whales seem to wear a perpetual smile and spend much of their lives under the Arctic ice.

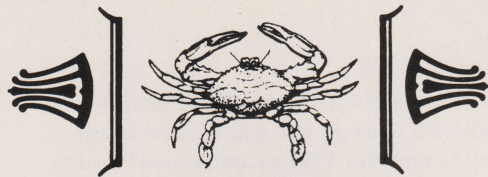




a Great White Shark ↓



Bull, Brown and Lemon Sharks feeding. ↓



The shark display facility in San Diego (see page 48) is contributing to man's knowledge of these highly efficient and structurally sophisticated animals by identifying and placing in perspective their position in the natural world. These are but some of the facets of shark biology previously neglected due to the difficulties of studying these

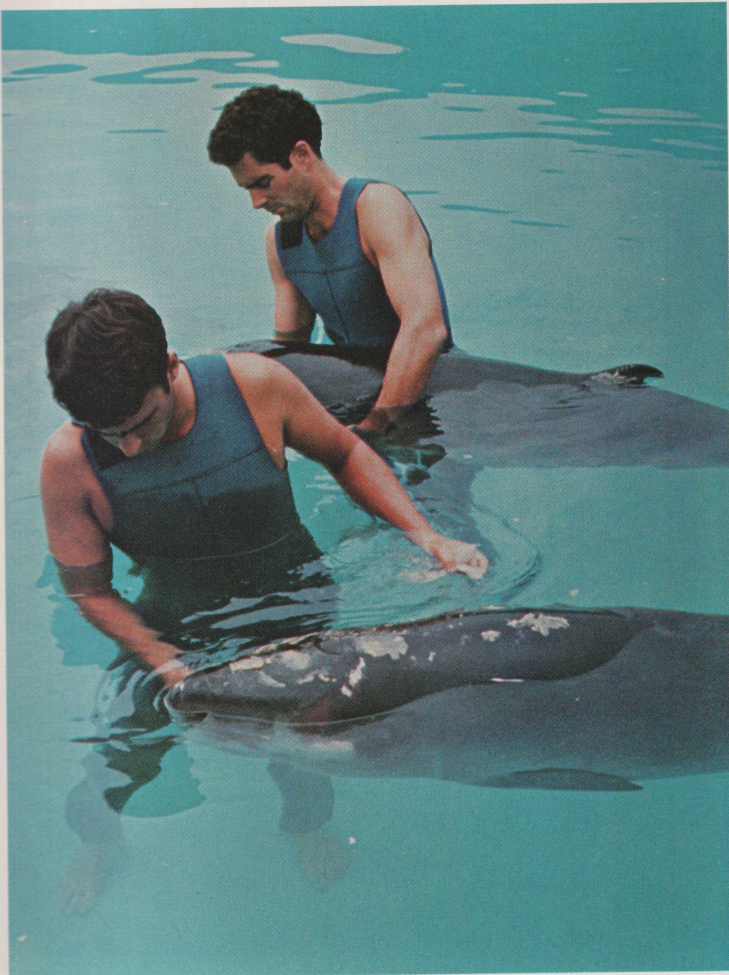
animals in the wild.

At the inland parks in Florida and Ohio hundreds of thousands of gallons of sea water are created by adding just the right chemicals to purified local water. This water is recycled over and over again in closed systems (below) that constantly cleanse and rebalance the artificial sea water.

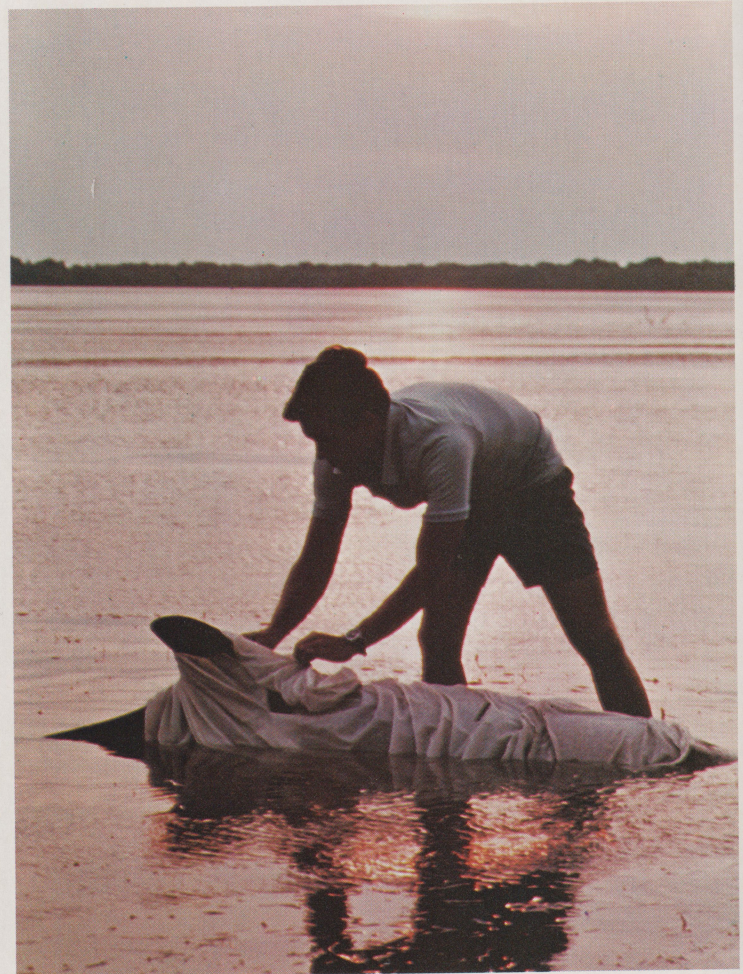




Research is Exploration . . .



1



2

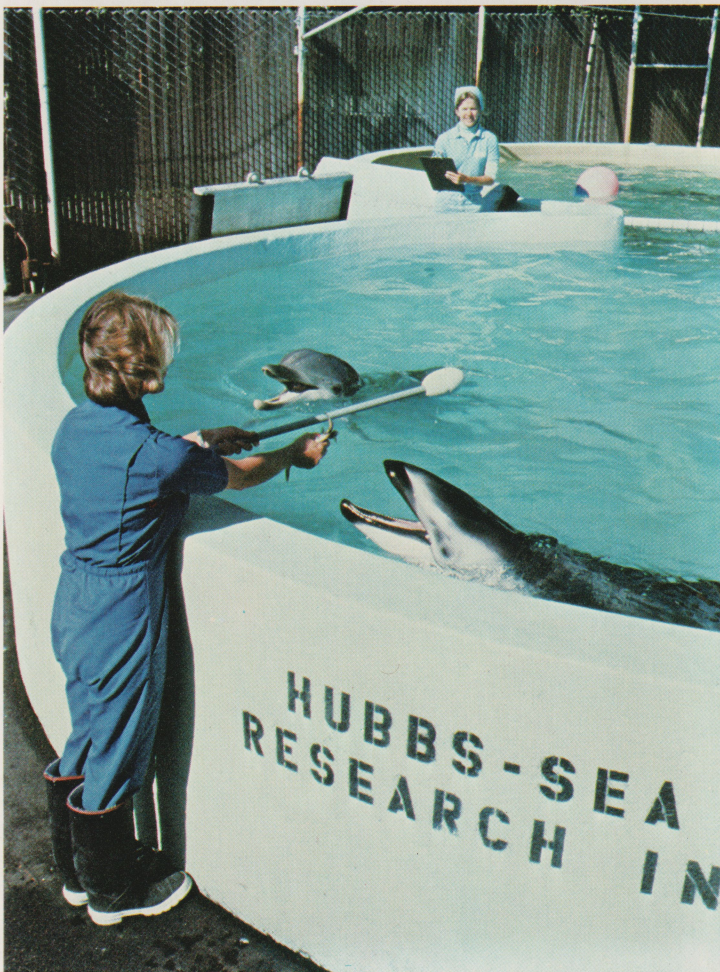
In addition to investigations of the many problems and challenges of maintaining and caring for its animals Sea World has through the years offered substantial support and made its facilities available to many private and public research organizations. These include the Naval Ocean Systems Center, the California Department of Fish and Game, the University of California, Scripps Institution of Oceanography, and Hubbs-Sea World Research Institute.

In 1963, a number of Southern Californians interested in the welfare of the ocean

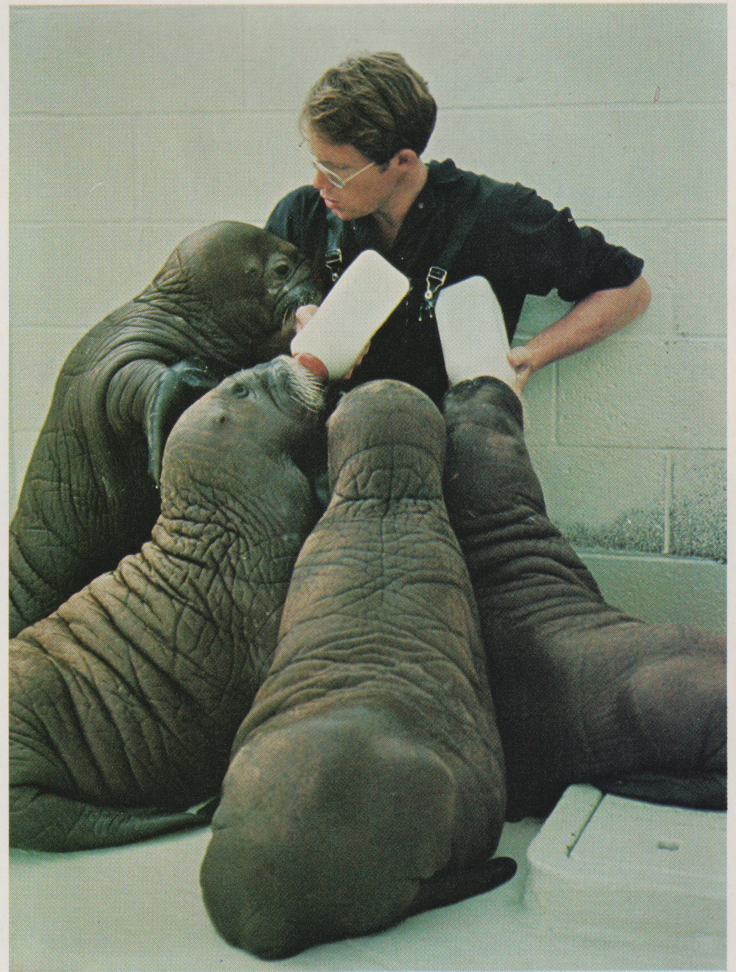
joined together to establish a research organization, calling it the Mission Bay Research Foundation. In 1977, in honor of Dr. Carl Leavitt Hubbs and his wife, Laura C. Hubbs, who have jointly made significant contributions to many areas of scientific research for more than sixty years, the organization was renamed and is today known as the Hubbs-Sea World Research Institute.

Institute headquarters are situated on Mission Bay in San Diego, adjacent to Sea World. Current activities include research

on the biology of Antarctic penguins in a specially constructed Polar Research Laboratory; bioacoustic and behavioral studies of marine mammals, sharks, and birds; various types of environmental monitoring; and mariculture of fish and shellfish. Field projects take Institute scientists throughout the world; such research is presently being conducted in the Antarctic, in Venezuela, and in Mexico. Numerous Institute programs are carried out in conjunction with academic establishments, government agencies, other private institutions, and with
(continued on page 41)



3



4

1. A pair of pygmy sperm whales receive special care, part of the ongoing effort to learn more about mammal physiology.
2. From rescue slings to medicine, Sea World's staff of veterinarians has advanced the science of saving beached mammals.
3. Student Research Assistants of the Hubbs-Sea World Research Institute monitor the behaviors of a bottlenose dolphin.
4. Walrus, like most aquatic mammals, are sociable creatures . . . they thrive on attention and willingly crowd in to express affection for the doctor.



† An Adelie penguin receiving a specialized formula, a hand feeding process that is continued throughout the first six weeks.



Until the chick achieves independence, usually about eight weeks each penguin's weight and food intake is carefully monitored.

† A Hubbs-Sea World Research Institute student assistant encounters a young elephant seal while on an Institute expedition in the Antarctic.



(continued from page 39)

Sea World. Cooperative international programs are conducted with scientists from many other nations including Mexico, Japan, and the Soviet Union. While grants from private and public agencies constitute the Institute's major source of funding, contributions from individuals and corporations provide additional financial support.

The Director of the Institute says, "With the accelerating use of the seas' resources the need to understand the special requirements of marine animals becomes increasingly imperative. Over-harvesting is not the only stress they are subject to. Our ignorance of their life histories and needs, false notions

of the role of predators in the ecosystem, the attribution of magical properties to marine mammals, and other erroneous beliefs, may also exert a negative impact upon their well-being. We must learn not only how to conserve and manage the populations occupying the oceans, but to properly conserve and manage their environment as well. We believe a deepening knowledge and understanding of the oceans, based on extensive scientific study, represents the only real hope of preserving the living resources of the sea . . . and the future of mankind may well depend on our success in that endeavor."



Carl Leavitt Hubbs-Laura C. Hubbs

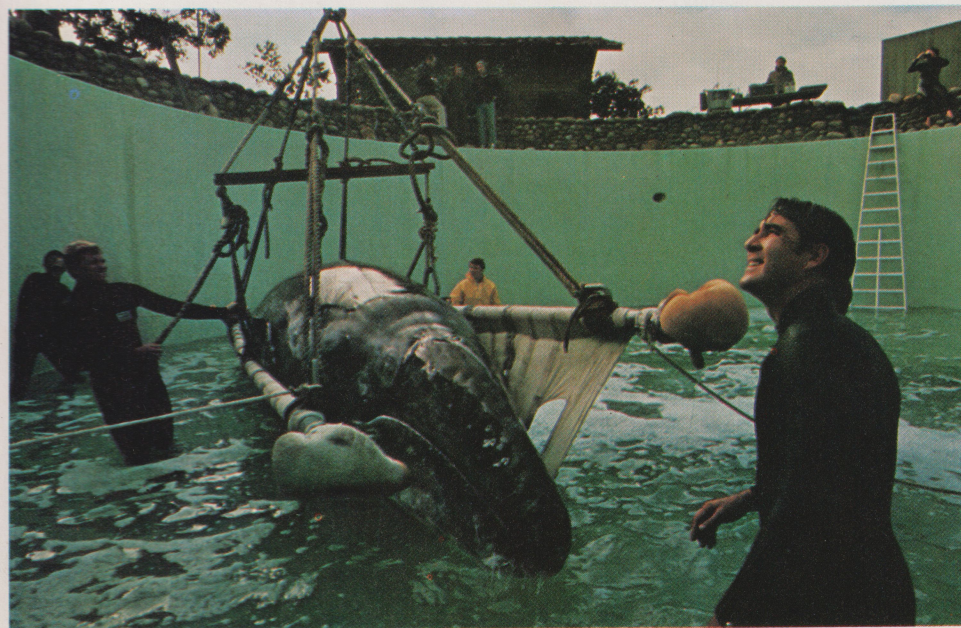


A noted guest joins key representatives of the Hubbs-Sea World Research Institute, to observe a group of California gray whales in San Ignacio Lagoon, Mexico.



The story of Gigi...

one of the most rewarding chapters in marine biology.



Gigi, a California gray whale was an 18 foot, 4300 pound youngster when she was brought to Sea World in San Diego in 1971. She was born in Scammon's Lagoon in Baja California, Mexico, where the gray whales spend every winter courting and bearing their young. With the logistical and financial support of Sea World she was observed extensively and numerous scientific studies were conducted by the University of California at San Diego and the Sea World Research Foundation (now Hubbs-Sea World Research Institute).

Gigi responded so well to her human companions and to the care they gave her that by the end of the year she was about to outgrow her pool. It was clear that the time had come to make plans for returning her to the wild.

Her release was timed to coincide with the northward migration of the gray whales to their Arctic feeding grounds. It was successfully accomplished on March 13, 1972, and her progress up the California coast was followed by means of signals transmitted



from a radio pack attached to her back. On May 5, that year, she was spotted south of San Francisco but no further signals were received.

Each succeeding year, during the southward migration, numerous sightings of Gigi were reported, but none could be verified. Then in February, 1977, a gray whale was photographed in San Ignacio Lagoon, with a white patch on its back like the one scientists had predicted would be left by the radio pack. Careful examination of the photo confirmed that this was indeed Gigi. Five years after her return to the wild she was almost fully grown, now measuring some 35 feet in length and probably weighing more than 30,000 pounds.

The opportunities of observing Gigi at Sea World have provided important information for the conservation and management of marine mammal populations, as well as for her own species. It is gratifying to know that she was able to adjust to her life in the wild as successfully as she had to being an international celebrity and one of the most closely monitored and highly publicized animals in history.



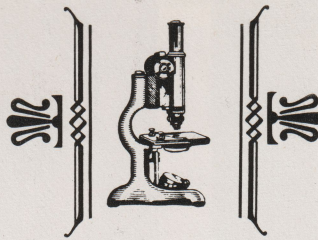
One of the vessels used in research expeditions throughout the world conducted by the Hubbs-Sea World Research Institute in its continuing efforts to expand man's knowledge of the seas.



An Institute biologist observing behavior of a wandering albatross with chick on the South Georgia Island, with gentoo penguins in the background.

A Staff Research Zoologist shown using an underwater camera to record behavior patterns of the common dolphin on videotape, one of the Institute's data-gathering techniques.





Emperor, Adelie, and the king penguins shown here must be kept in temperatures that simulate — their Antarctic homeland. The Hubbs-Sea World Research Institute is presently cooperating with the National Science Foundation in an effort to study, maintain, and breed them in a controlled environment.

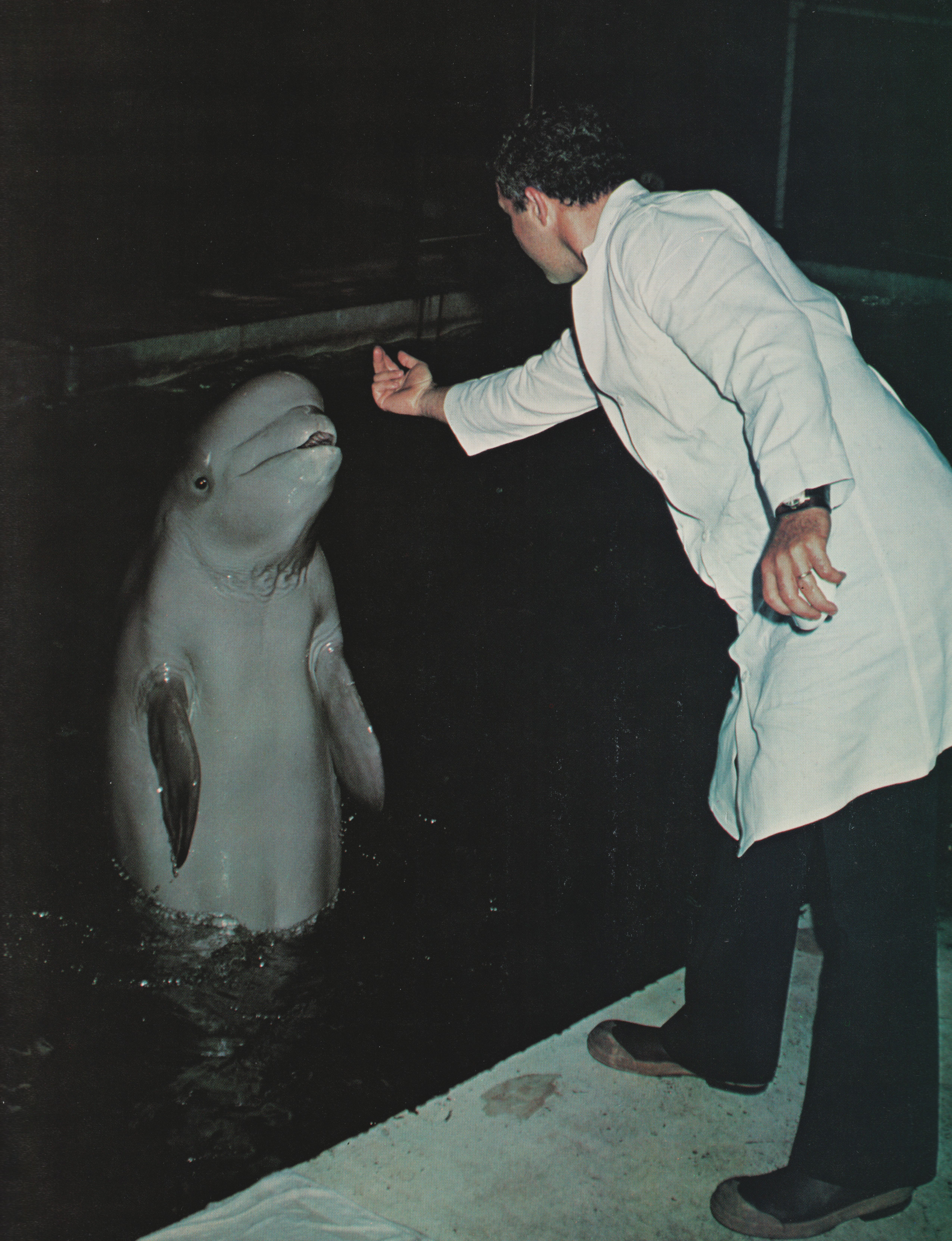
“simulated Antarctic temperatures...”

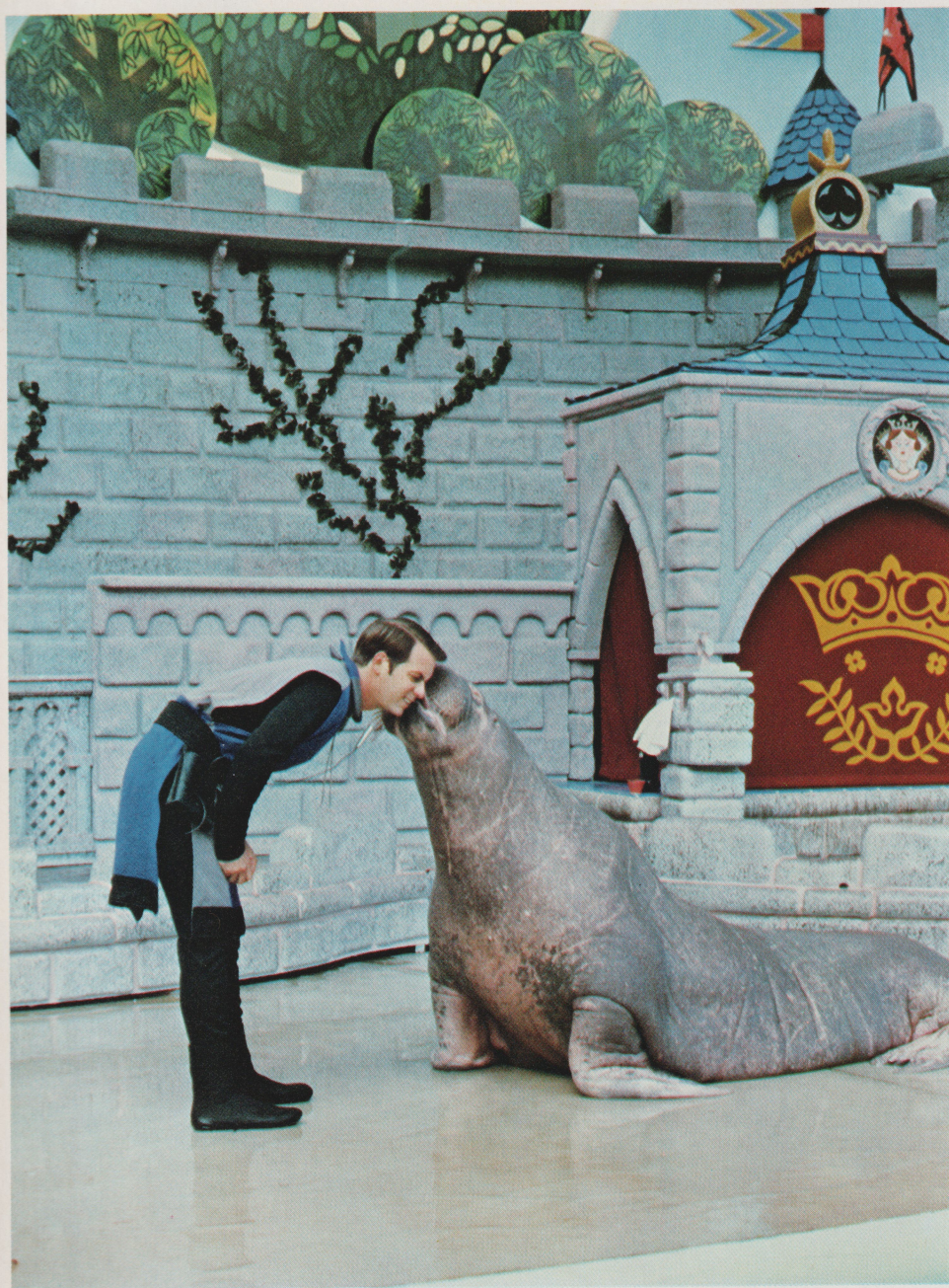
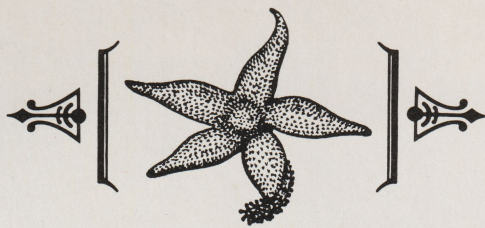
Belinda, an inquisitive beluga, or white whale, interacts with an Institute scientist. — Research is underway to study the beluga’s highly advanced echo-location system, one that enables them to find food and locate one another in nearly any circumstance.

“sophisticated animal laboratories...”

All the major health tests can be carried out in Sea World’s highly sophisticated animal laboratories. — Selected veterinary students add to their practical knowledge of mammalogy under the direction of Sea World’s professional staff.







At Sea World humans and aquatic mammals have learned to live together, a situation that begins by honestly liking and enjoying one another's company. Referring to this common bond, one biologist

"each learns from the other..."

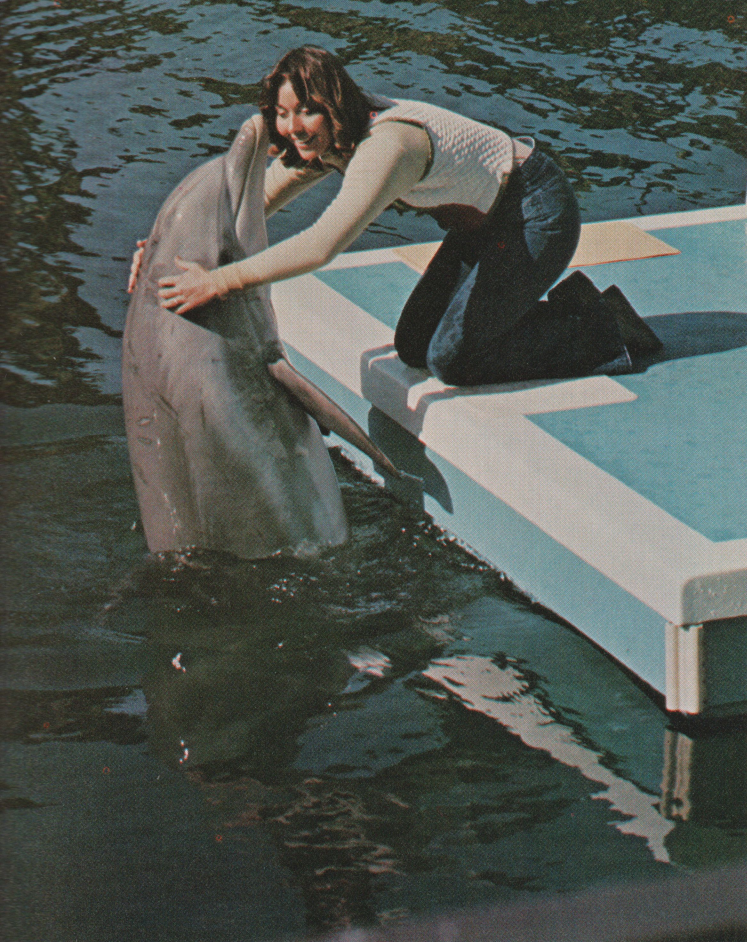
ogist says "...there are just two kinds of life, plant and animal, and none of the animals have sprouted any leaves."

Communications between humans and sea animals have developed in unusual and provocative ways at Sea World ... and each has learned from the other.

"a bond of affection..."

"Tactile reinforcement" means supplementing food rewards with petting, stroking, and gentle scratching, and it's a key part of the relationship. The result is a bond of affection that transcends any usual relationship between humans and animals.

Learning to Live Together



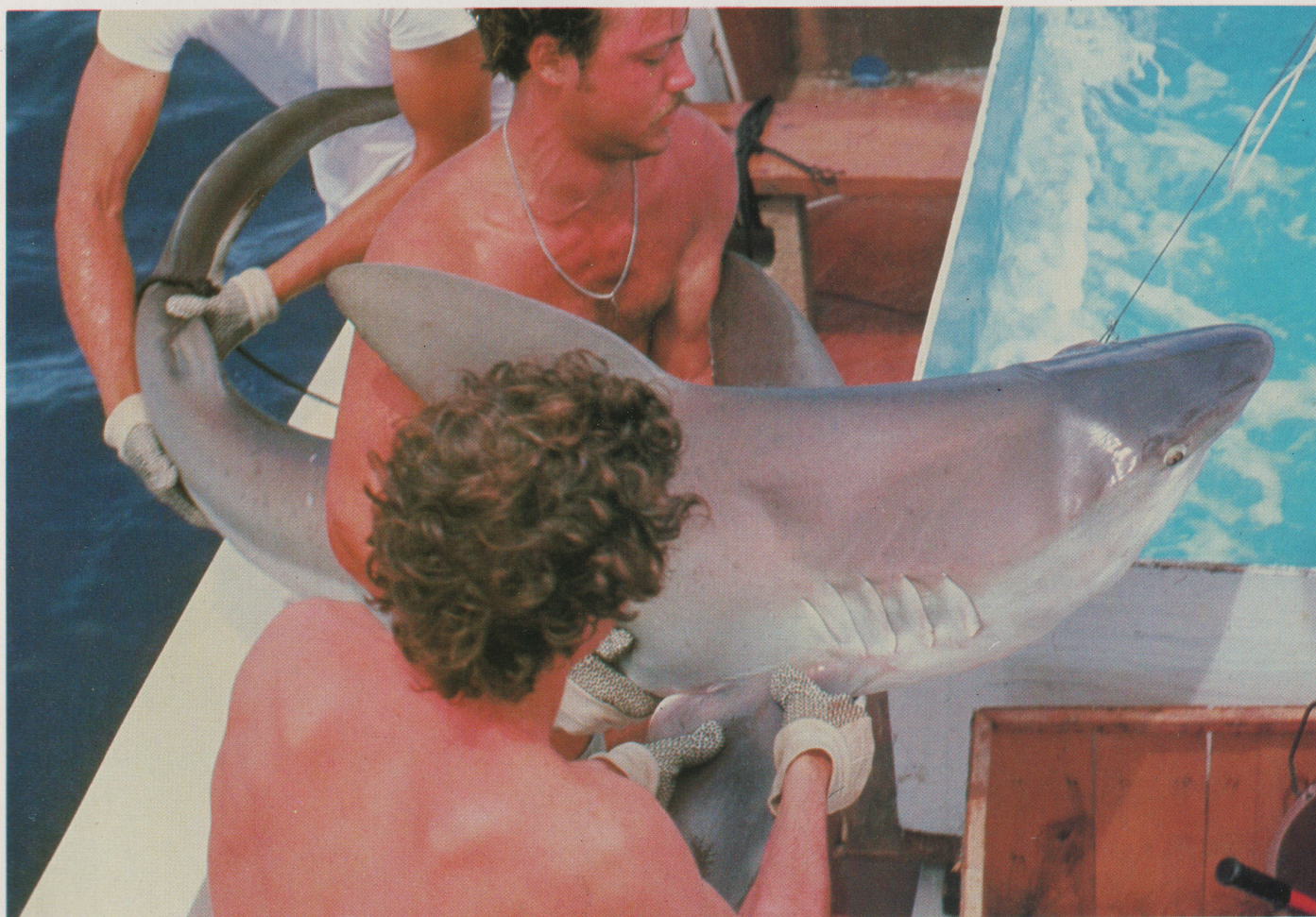
Begins with Liking Each Other...





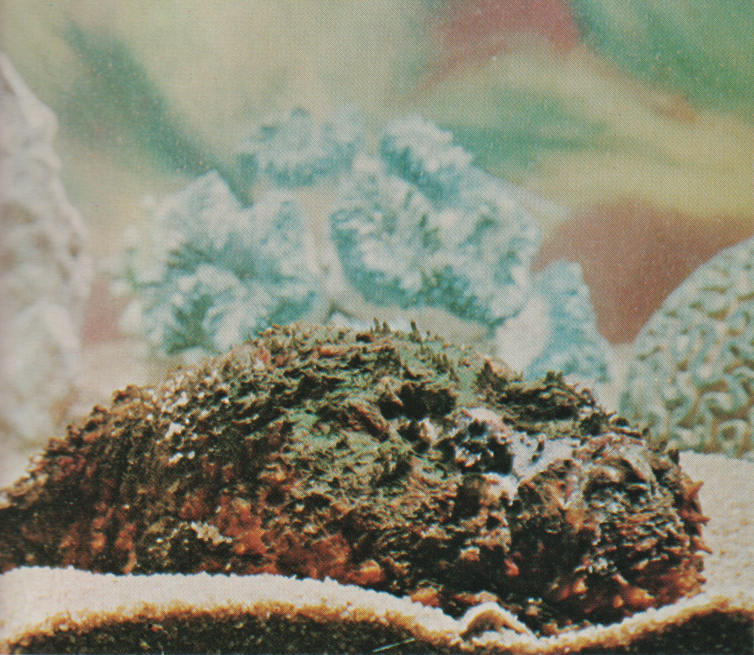
The shark display in San Diego, the Sea World Shark Institute on Long Key in Florida, and a shark exhibit soon to open at Sea World in Orlando, provide a useful liaison between the general public and the magnificent shark. Through living presentations these serve to modify the generally erroneous view of sharks held by most laymen and offer the scientist a unique and necessary research facility.

The salt and fresh water aquariums in the three Sea World parks represent the most extensive collection of aquatic life in the world. Thousands of species bring the beauty of the world of water to life . . . from the venomous stonefish to the gentle sea horse; from the parrotfish and graceful angelfish to the chambered nautilus and deadly piranhas. Throughout the year the salt and fresh water aquariums of Sea World are living laboratories for anyone interested in marine life.



A team of SeaWorld biologists demonstrate the care used in transporting animals, an eight foot brown shark in this instance, from the wild to the Shark Institute.

Life In the Sea



1. A stonefish, one of the world's most venomous creatures.



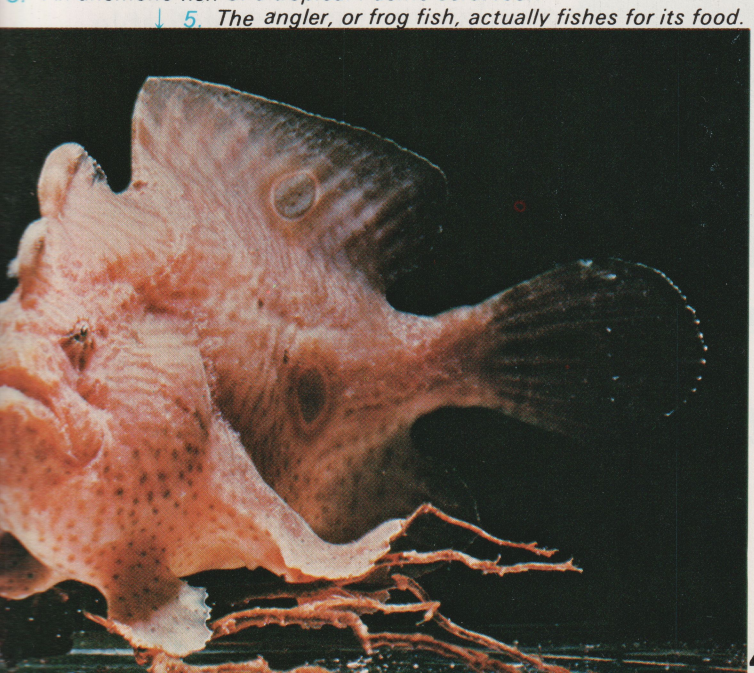
2. The Pacific Ocean is home to these Moorish idols.



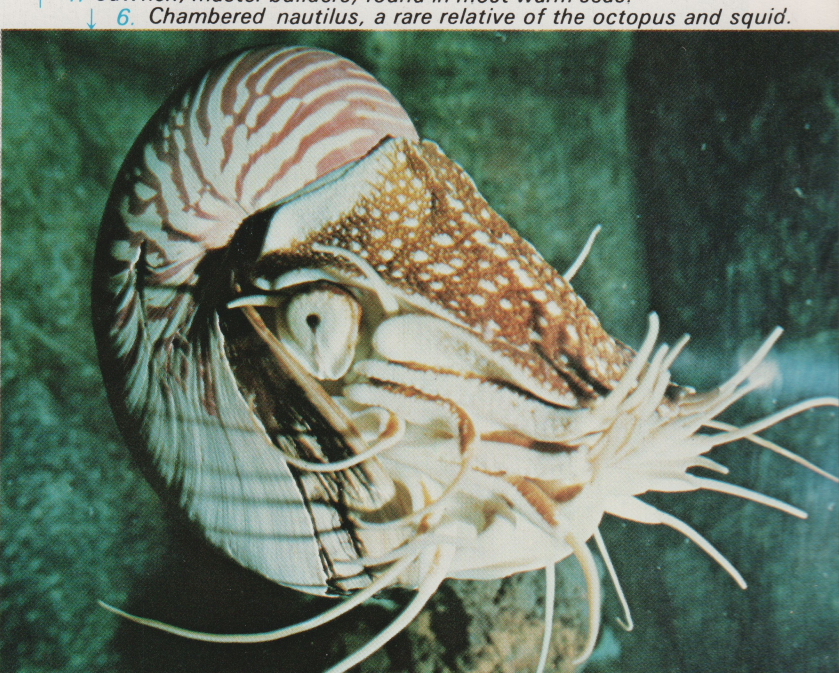
3. An anemone fish of a tropical Pacific coral reef.



4. Jawfish, master builders, found in most warm seas.



5. The angler, or frog fish, actually fishes for its food.



6. Chambered nautilus, a rare relative of the octopus and squid.



More than 2,500 birds, including many exotic and endangered species, comprising one of the most important collections in North America, are in residence at Sea World.

**“important
collections in
North America...”**

Each morning brightly colored tropical parrots are carried by a feeding wagon to their favorite perches in the park. ← In the laboratory many species, such as the endangered Hawaiian Ne-ne goose, are breeding and hatching their eggs successfully.

**“an important,
valuable resource...”**

Such research is beginning to provide the scientific community with much valuable information, an important resource in some instances against the possibility of extinction.

The Science of Aviculture



1. Mandarin ducks in the courting season.



2. Hawaiian Ne-ne geese, an endangered species now reproducing at Sea World.

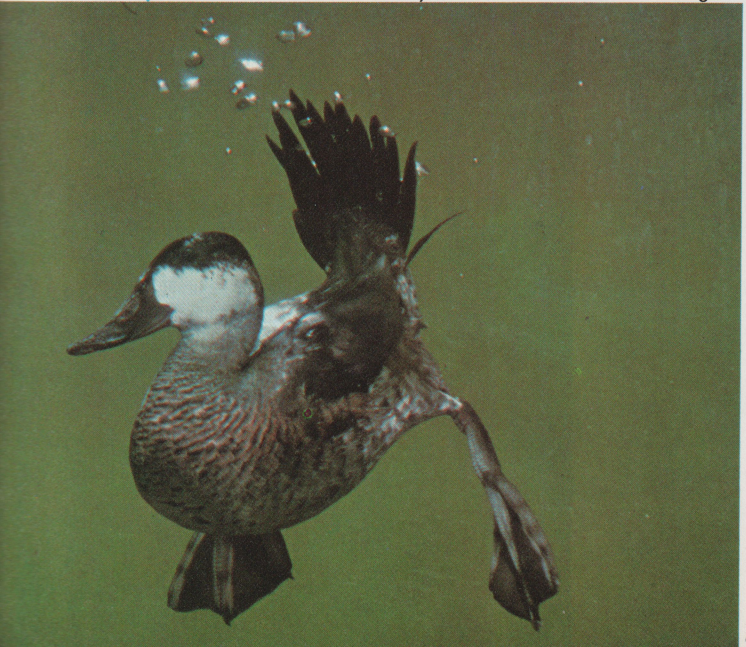


3. Adelie penguins from Antarctica.



4. Rockhopper penguins, members of the crested penguin group.

5. North American ruddy duck, an underwater forager.



6. Whistling swans, one of two species native to North America.





The pose at poolside is a refinement of a common behavior in the wild, where killer whales slide onto the ice in pursuit of their prey.

As recently as 1963, marine scientists were calling the killer whale "the most dangerous creature a man can meet." But experience at Sea

**"a great
gentleness..."**

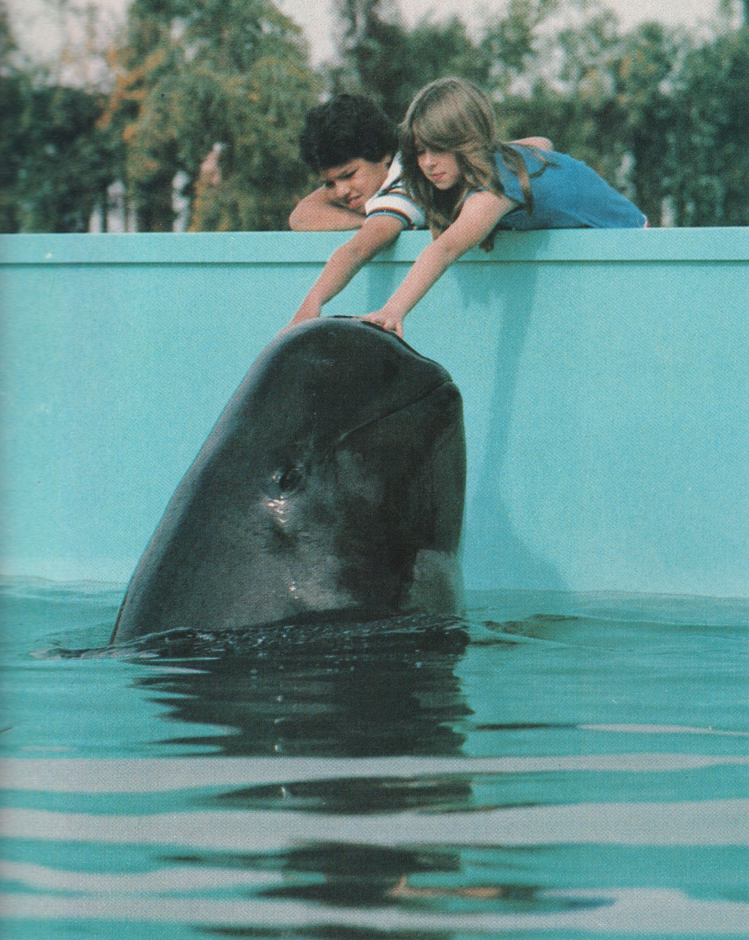
World and elsewhere since 1964 has revealed a new dimension of this animal's personality—a great gentleness.

An animal the size of a killer whale, with his tremendous agility, could easily impose his will upon us, likely resulting in

**"a complete
mutual trust..."**

a severe injury. But at Sea World that has never happened. Here a complete, mutual trust exists between man and animal...on stage and in the water.

Marine Mammal World



Two Sea World visitors become acquainted with a pilot whale.



A joyous pair of Atlantic bottlenose dolphins.

visitors and animal lovers
 stretching to both coastline
 the Midwest and from the
 California coast to Alaska
 and Japan. With a few more
 the world's largest

The white or beluga whale reflecting one of many expressions.



Killer whales and guests enjoy San Diego's whale and dolphin petting pool.





Every visitor to Sea World remembers the restful beauty of the surroundings. Tranquil lakes and ponds, lush green grass, flowering shrubs and lovely trees, gentle elevations and wide walkways, combine to create a uniquely relax-

“relaxing atmosphere...”

ing atmosphere. Landscape artists, building on the plant life native to the areas, offer the visitors a botanical journey stretching to both coasts from the midwest, and from the California desert to Australia and Japan. Most of the varieties are tagged for identification purposes and each park hosts many garden club and similar group tours each year.

“so rest and enjoy...”

The sound and sight of water pervades each area and hundreds of shaded benches, scattered through the parks, are an unspoken invitation ... “rest and enjoy.”

Where Landscaping Is An Art

Back covers:

Page 56: the magpie goose

Page 57: the entertainers

Page 58: a sea maid and dolphin



Waterfalls and quiet pools, surrounded by semi-tropical plants, are part of the tranquil settings of Sea World.



Sea World of Ohio is noted for its rose gardens and for the verdant, natural feel of its rolling midwestern terrain.

Many of the plants at Sea World of San Diego are not native to the area, but the landscape staff has learned to properly nurture them.



A temperate climate allows the landscape artists at Sea World of Florida to create habitats and backgrounds pleasing to the animals and park visitors alike.





Sea World... The Year 'Round!

Major entertainers appear regularly on the floating stage of the Atlantis Theatre at Sea World of Florida. Other stars find Sea World parks in San Diego and Ohio ideal locations from which to broadcast special programs.



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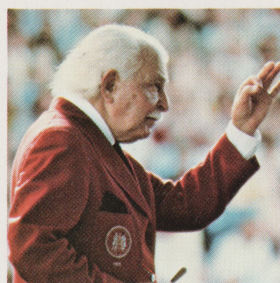
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1. Wayne Newton, "Doc" Severinson
2. Captain Kangaroo and friend
3. Dinah Shore
4. Ethel Merman
5. Bob Hope
6. Helen Reddy
7. Tony Orlando
8. Arthur Fiedler
9. Kris Kristofferson, Rita Coolidge
10. Perry Como
11. Art Linkletter
12. Bill Cosby
13. The Atlantis Theatre

